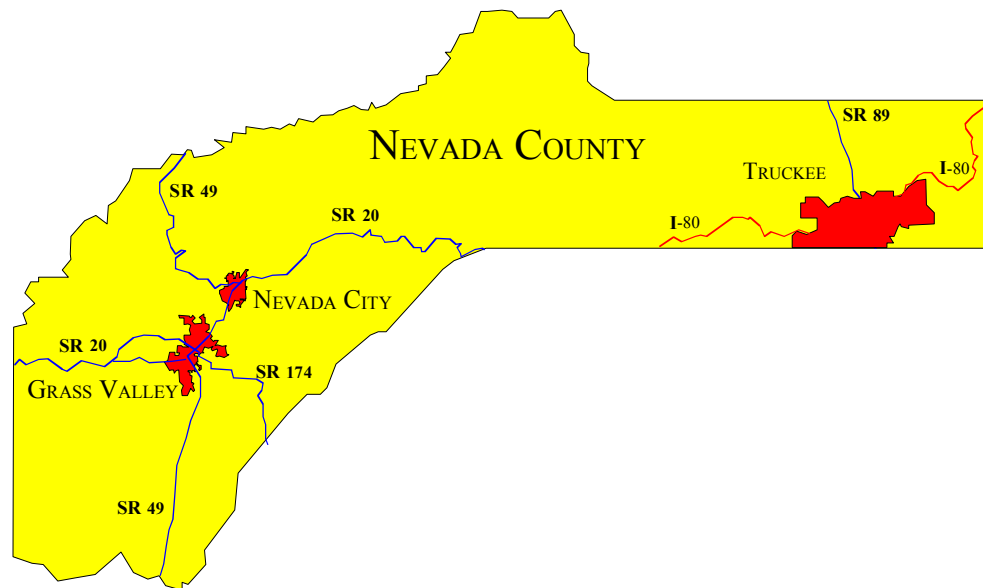


NEVADA COUNTY



DRAFT

2005

REGIONAL

TRANSPORTATION PLAN

November 2, 2005

NEVADA COUNTY TRANSPORTATION COMMISSION

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I. EXECUTIVE SUMMARY

The Regional Transportation Plan (RTP) includes the actions, funding recommendations, and policy direction necessary to meet the needs of each transportation system component in Nevada County. The RTP identifies existing and future transportation problems, proposes solutions, considers all modes of travel, and identifies anticipated funding for projects and programs. The RTP addresses special factors affecting the transportation system, such as air quality, land use, special transportation needs and multimodal integration.

PURPOSE OF THE PLAN

The purpose of the 2005 Nevada County Regional Transportation Plan, is to:

- ◆ Identify and document the region's mobility needs and issues;
- ◆ Attempt to resolve regional mobility issues and provide policy direction for local plans;
- ◆ Document the region's goals, policies, and objectives for meeting current and future transportation mobility needs and for implementing the transportation measures relative to air quality requirements;
- ◆ Set forth an action plan to address transportation issues and needs consistent with regional, State and Federal policies;
- ◆ Identify transportation improvements in sufficient detail to aid in the development of the Regional Transportation Improvement Program (RTIP) and State Transportation Improvement Program (STIP) and to be useful in making decisions related to the development and growth of the region, and to permit an estimate of emissions impacts for demonstrating conformity with the State Implementation Plan (SIP) for achieving air quality standards;
- ◆ Document the financial resources needed to implement the region's transportation plan and meet required emission reductions and performance standards; and
- ◆ Provide the foundation for transportation decisions by local, regional and state officials;
- ◆ Provide input to the California Transportation Commission in development of its Annual Report to the Legislature.

REGIONAL TRANSPORTATION GOALS

The Regional Transportation Plan Policy Element identifies the transportation goals, policies and objectives to meet the needs of the region and is consistent with the comprehensive regional goals, and reflects consideration of environmental, social, and economic goals.

The Goals, Objectives, and Policies have been developed to form the basis of the Action Element of the Regional Transportation Plan as well as being the foundation for long term planning. In addition, land use decisions and regional transportation policy are linked to the region's air quality.

The Overall Goal of the Regional Transportation Plan is to provide and maintain a transportation system that enhances safety, the efficient movement of all people, goods, and services, and environmental quality.

This document identifies deficiencies in the transportation system operations and funding. It is widely recognized that the region will not be able to "build its way out" of these problems. In order

to accomplish the goal of providing for the safe and efficient movement of all residents, visitors, and goods, the Nevada County Transportation Commission must seek to program projects that will provide the best investment of public funds and assist local jurisdictions in bringing those projects to completion. In selection of projects, the communities must recognize the importance of protecting environmental quality, while maintaining a vital economy. Projects identified in the RTP support local land use and population projections and address economic development and social equity issues identified in the General Plans of the County and the cities.

It is incumbent upon the Nevada County Transportation Commission to seek to involve and educate the citizens of the region as to the issues connected with transportation. Further, the Commission must be creative in assisting the region in developing the revenues to construct improvement projects.

SUMMARY OF REGIONALLY SIGNIFICANT TRANSPORTATION ISSUES

Goals, objectives and policies also provide regional input for consideration in the State evaluation of significant transportation issues. Transportation issues facing Nevada County which have been identified as regionally significant include the following:

- ◆ **Funding Shortages**
- ◆ **Air Quality Conformity**
- ◆ **Coordination of Land Use, Air Quality, and Transportation Planning**
- ◆ **Providing and Maintaining a Transportation System that Enhances Safety, the Efficient Movement of all People, Goods, Services, and Information, and Environmental Quality.**
- ◆ **Support New Technologies**

TRANSPORTATION SYSTEM ALTERNATIVES

Three long-range transportation system scenarios were examined in the environmental documentation process as alternatives to the Nevada County RTP. The Financially Constrained Scenario represents the proposed Nevada County Regional Transportation Plan.

The **Financially Constrained Scenario** is designed to address and to emphasize the implementation of transportation projects that currently have funding secured and projects that would be financed through Federal, State, and local funding processes that are already set in place. Although improvements under this scenario are based on identified future needs, funding forecasts indicate that all of the improvements necessary will not be able to be implemented due to funding constraints.

The three transportation system scenarios evaluated as alternatives to the RTP in the Draft Program Environmental Impact Report are described below:

1. The **Transportation System Management and Transportation Demand Management (TSM/TDM) Alternative** is designed to minimize roadway impacts and to manage the need for roadway capacity using techniques other than new construction. It also emphasizes the development and maintenance of alternative transportation projects, including public transit,

aviation, bicycles, and other non-motorized transportation.

2. The **No Project Alternative** includes services and facilities which currently exist and the maintenance of those services and facilities. It would not include those projects which have not yet been funded or constructed.
3. The **Additional Funding Alternative** represents an expanded funding program needed to construct all or nearly all of the improvements listed in the RTP. This alternative assumes a new funding source equivalent to a ½ cent sales tax in Nevada County. A local funding initiative would need to be passed for a sales tax to be implemented.

II. INTRODUCTION

PURPOSE

The purpose of this plan is to document the short-term (2005-2015) and long-term (2016-2027) regional transportation needs covering the RTP horizon and set forth an effective, cost-feasible action plan to meet these needs. The RTP documents the policy direction, actions, and funding strategies designed to maintain and improve the regional transportation system. The RTP promotes a continuous, comprehensive, and cooperative transportation planning process that facilitates the efficient development and implementation of projects while maintaining Nevada County's commitment to public health and environmental quality.

As the Regional Transportation Planning Agency (RTPA) for Nevada County, California State law requires the Nevada County Transportation Commission (NCTC) to prepare, adopt, and submit an updated RTP to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) every four years.

An addendum to the Program Environmental Impact Report (EIR), State Clearinghouse #99072038, is currently being prepared in compliance with the California Environmental Quality Act (CEQA). An EIR is an informational document, the purpose of which is to inform public agency decision makers and the general public of the significant environmental impacts of a proposed project, to identify possible means to minimize significant effects, and to describe reasonable alternatives to the project. As defined in CEQA, "significant effect on the environment", means "a substantial, or potentially substantial adverse change in the environment." Although the EIR does not dictate the lead agency's ultimate decision in adopting the RTP, it must be considered, along with any other information, to assist the lead agency's decision-making process. As provided in the CEQA Guidelines, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. In complying with this obligation, the public agency has to balance a variety of public objectives, including economic, environmental, and social.

Because the RTP is a program level planning document containing general policies, guidelines, and lists of proposed projects for which specific design details have not yet been completed for all projects, the object of the environmental analysis in this Program Level EIR provides a general overview of the potential impacts of the recommended RTP improvements. The degree of specificity of this Program Level EIR corresponds with the degree of specificity in the proposed RTP. The RTP provides limited information on site-specific transportation improvements; therefore, the EIR is limited in its ability to precisely determine potential significant site-specific impacts associated with future transportation improvement projects. Analysis of site-specific environmental impacts of transportation improvement projects will be the responsibility of the lead agency for the specific project.

A list of common acronyms are defined in Appendix A-1 for quick reference.

RTP PROCESS

The NCTC is responsible for the quadrennial preparation of the Nevada County RTP. NCTC must ensure that all requirements of the RTP process are met. The NCTC then prepares a draft report that includes all of the required elements, and solicits public comment from the Technical Advisory Committee (TAC), jurisdictions, neighboring Regional Transportation Planning Agencies, and a wide variety of groups, including the general public. The comments solicited are responded to and/or included in the final document as appropriate. Environmental documentation, in conformance with California Environmental Quality Act (CEQA) is also prepared and distributed or

made available to the groups above. NCTC then adopts the RTP and environmental documentation in accordance with State and Federal requirements.

NCTC will be responsive to changing conditions throughout the county on an ongoing basis. As new or redefined projects are needed, the action and financial sections will be amended.

Government Participation

The planning of the county transportation system is accomplished through the coordination of various governmental agencies, advisory committees and public input:

- ◆ The **Nevada County Transportation Commission**, serving as the Regional Transportation Planning Agency, is made up of seven Commissioners and four staff. The Commission is made up of the following representatives: the Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors, as well as, two county-at-large representatives, the incorporated cities of Grass Valley, Nevada City, and the Town of Truckee each have one representative.
- ◆ The **Technical Advisory Committee** is made up of representatives of local public works and planning departments, Caltrans, public airport operators, the air pollution control district, and public transit operators. The Committee provides technical input on transportation issues and ensures that there is coordination and cooperation in the transportation planning process.
- ◆ The **Transit Services Commission** provides policy direction and advises the transit operator in western Nevada County on matters relating to the daily operations of the transit and paratransit services. The Transit Services Commission is made up of the following representatives: the Nevada County Board of Supervisors appoints two representatives from the Board of Supervisors, as well as, two county-at-large representatives; the City Councils of Grass Valley and Nevada City each have one representative, and jointly appoint one city-at-large representative.

Citizen Participation

Public involvement is a major component of the transportation planning process. The NCTC makes a concerted effort to solicit public input in many aspects of transportation planning within Nevada County. Specific examples are listed below:

- ◆ Each year, public notifications are sent out to encourage participation in transportation planning processes, such as the annual unmet transit needs public hearing held by NCTC and numerous public workshops relating to the transportation projects and planning activities of the NCTC.
- ◆ Citizens are encouraged to attend and speak at the NCTC meetings on any matter included for discussion on the agenda at that meeting.
- ◆ The NCTC produces and distributes a bi-monthly newsletter and maintains a website in an effort to keep the public informed of transportation planning efforts underway in Nevada County.
- ◆ The Social Services Transportation Advisory Council (SSTAC) consists of appointed citizens representing a wide range of transit dependent groups. The SSTAC recommends action to the NCTC relative to the unmet transit needs finding and advise the Commission on transit issues. In compliance with Public Utilities Code 99238 the current SSTAC consists of the following representatives:
 - One representative of potential transit users who are 60 years of age or older.

- One representative of potential transit users who are disabled.
- Two representatives of the local social service providers for seniors.
- Two representatives of local social service providers for the disabled.
- One representative of a local social service provider for persons of limited means.
- Two representatives from the local consolidated transportation service agency.
- Two representatives of transit users in western Nevada County.
- One representative of transit drivers in western Nevada County.

Every person in Nevada County is affected by transportation and, as such, is an important component of the transportation planning process. All interested parties are encouraged to provide input into the transportation planning process.

Regional Setting

Nevada County lies within the northern portion of California, stretching from the eastern end of the Sacramento Valley across the Sierra Nevada to the State of Nevada. Figure 1 displays the regional area and key statistics relative to the area.

Nevada County's geography has led to distinctive development patterns in the eastern and western portions of the County. Western Nevada County is very attractive for residential and commercial developments due to the rural character of the area and the quality of life it affords.

The Grass Valley/Nevada City area has become the primary population center in western Nevada County. This foothill area of the Sierras is a combination of tree-covered rolling hills and stream channels, which have greatly affected road and utility locations. The major transportation facilities in western Nevada County are State Routes 20, 49, and 174.

The major transportation issues facing western Nevada County include the increased demand for transportation resulting from community growth, and the funding needed for the facilities and services to meet the existing and future demand. State Route 49 is western Nevada County's main link to the Interstate 80 corridor and the Sacramento area. Peak hour congestion on this facility is a concern. Area businesses and residents hope to improve safety on SR 49 and reduce traffic delays. There is a strong desire to maintain the area's rural ambiance and enhance its natural qualities, while improving the safety and operation of transportation facilities. To accomplish these desires, it will be important to promote and enhance regional transit service, implement appropriate demand management and systems management strategies, and develop comprehensive corridor plans that utilize design features for highway improvements that are in concert with community standards.

Eastern Nevada County is known for its many recreational opportunities. This mountainous area of the Sierra Nevada offers a full range of winter and summer recreational activities, such as skiing, camping, and hiking. These recreational opportunities and the proximity of this area to Reno and Lake Tahoe increase its popularity as a tourist attraction.

The Town of Truckee is the major population center for eastern Nevada County. In addition to being a station for rail freight and passenger service, Truckee is at the crossroads of Interstate 80 and State Routes 89 and 267. Interstate 80 is a major transcontinental route, and the two state routes are the northern entrances to the Tahoe Basin.

The major transportation issues in eastern Nevada County are related to the tremendous amount of regional traffic and its resulting environmental impacts. Major arterial routes in eastern Nevada

County have peak period demands that exceed system capacities. Because of environmental and funding constraints, large-scale highway construction to meet the demand is rarely realistic and often undesirable. While some highway construction will aid the situation, there is an urgent need to implement demand management strategies on a regional basis, and to enhance alternatives to the automobile.

STUDY AREA

As displayed in Figure 1, the study area includes the entire County of Nevada. Travel characteristics within the study area vary between the eastern and western County primarily due to their distinctive land use patterns.

The eastern portion of the study area contains several land uses, which attract more trips than they produce, such as the ski resorts and the Truckee shopping area. This land use pattern causes many trips to end within the area, but originate outside the area. Another prominent travel characteristic of the eastern County are the trips on the I-80 Corridor that pass through the area.

Land use patterns in the western portion of the study area typically consist of more residential uses than commercial and industrial uses. Large residential areas such as Lake of the Pines, Lake Wildwood, and Alta Sierra create many trips that originate within the study area, but end outside the area, particularly for trips from home to work.

DEMOGRAPHIC TRENDS

In the period between 1975 and 1990, the average annual population growth rate in Nevada County exceeded five percent. This growth rate was one of the highest in the state and did not allow local governments to keep pace with infrastructure, maintenance, and improvements. Fortunately, the growth rate slowed significantly between 1990 and 2000 and continues to be the trend.

As might be expected, population growth in western Nevada County has occurred predominantly around the Grass Valley/Nevada City area. In addition, much of Nevada County's growth has occurred on large lots in the rural areas of the county, which does not assist in the cost-effective operation of public transportation services. Outside the Grass Valley/Nevada City area, a significant amount of population growth has occurred in the following large residential subdivisions:

- | | |
|---------------------|---|
| ◆ Lake Wildwood | Approximately 2,836 residences. Located adjacent to Highway 20 west of Grass Valley/Nevada City near the Yuba County line. |
| ◆ Lake of the Pines | Approximately 1,800 residences. Located adjacent to Highway 49 south of Grass Valley/Nevada City near the Placer County line. |
| ◆ Alta Sierra | Approximately 2,600 residences. Located adjacent to Highway 49 south of Grass Valley/Nevada City. |

In eastern Nevada County the Town of Truckee, which incorporated in 1993, experienced rapid growth between 1990 and 2000. According to an analysis of Truckee's population growth since 1990 conducted by the Town's Planning Department in 2004, the average annual growth rate between 1990 and 2000 was 4.5 percent. Since 2000, the average annual growth rate slowed, between 2000 and 2004, to an average annual growth rate of 2.0 percent. Much of the population growth has occurred in the large Tahoe-Donner, Glenshire, and Prosser residential subdivisions.

TABLE 1
RECENT POPULATION CHANGE BY LOCATION

NEVADA COUNTY	2000 Pop.	% Change 2000-01	2001 Pop.	% Change 2001-02	2002 Pop.	% Change 2002-03	2003 Pop.	% Change 2003-04	2004 Pop.
Grass Valley	10,922	7.6%	11,750	0.9%	11,850	0.4%	11,900	1.3%	12,050
Nevada City	2,996	-0.2%	2,990	0.3%	3,000	0.3%	3,010	-0.3%	3,000
Truckee	13,864	1.3%	14,050	3.6%	14,550	1.4%	14,750	1.7%	15,000
Unincorporated	64,251	-1.2%	63,500	1.6%	64,500	1.6%	65,500	0.8%	66,000
County Total	92,033	0.3%	92,300	1.7%	93,900	1.3%	95,100	1.1%	96,100

Source: State of California, Department of Finance, *E-4 Population Estimates for Cities, Counties, and State, 2001-2004, with DRU Benchmark*. Sacramento California, May 2004.

Almost all communities in Nevada County are projected to experience at least moderate growth over the next 20 to 25 years, which implies that there will be additional demand placed on the area's roadway system.

Nevada County's population increased 1.1 % between January 2003 and January 2004. Data from the California Department of Finance indicate that for this period, Nevada County's annual growth rate was lower than neighboring Placer County (3.0%), El Dorado County (1.3%), Yuba County (1.6%), and the state's growth rate of 1.5%.

The California Department of Finance's *Population Projections by Race/Ethnicity, Gender and Age for California and Its Counties 2000-2050*, released in May of 2004, estimate that Nevada County's population will be 106,210 by the year 2010. According to this estimate, Nevada County's population would increase 10.5% over the next six years (2004-2010) with an annual average growth rate of approximately 1.8 percent. These population projections also estimate that Nevada County's population in the year 2020 will be 126,912. According to this projection, the population would increase 32% over the next sixteen years at an average growth rate of 2.0 percent. By the year 2030 Nevada County's population is projected to be 137,965. As Nevada County's population increases, additional demand will be placed on the existing transportation infrastructure. Therefore, the analysis contained in this RTP reviews the need for improvements to existing facilities, as well as, the need for new facilities.

ORGANIZATION OF THE REPORT

The remainder of the RTP is organized as follows:

Chapter III - Policy Element identifies the goals, objectives, and policies for meeting the region's transportation mobility needs.

Chapter IV - Action Element provides a discussion of each component of the transportation system and transportation related issues and includes a short-term and long-term action plan.

Chapter V - Financial Element details the financial assumptions and revenue forecasts and presents a financially constrained funding scenario in correlation with the *Action Element* of the RTP.

Figure 1 Study Area

III. POLICY ELEMENT

PURPOSE

The Regional Transportation Plan Policy Element identifies the transportation goals, objectives, performance measures, and policies to meet the needs of the region and reflects consideration of environmental, social, and economic goals.

The Goals, Objectives, and Policies have been developed to form the basis of the Action Element of the Regional Transportation Plan as well as being the foundation for long term planning. In addition land use decisions and regional transportation policy are linked to the region's air quality.

The purpose of the Policy Element is to set a policy framework by which the County's mobility needs are identified and met. The goals, objectives, and policies listed below are the result of an extensive public participation program associated with the Nevada County General Plan Update process, as well as, direction received from the various decision-making entities in the County. These entities include, but are not limited to, the NCTC, the Nevada County Planning Commission and Board of Supervisors, and key representatives of Grass Valley, Nevada City, and the Town of Truckee.

REGIONAL ISSUES

Goals, objectives and policies also provide regional input for consideration in the State evaluation of significant transportation issues. Transportation issues facing Nevada County, which have been identified as regionally significant, include the following:

Transportation Funding Shortages

Between fiscal year 2002/03 and 2004/05, approximately \$3.3 billion has been diverted from transportation sales tax funds to the State General Fund. The diversion of sales tax revenues has occurred even though in 2002 nearly 70% of the voters approved Proposition 42, which required that the State sales tax on motor fuels be used for transportation. There is no provision to repay these funds in the near future.

“Where the State once had a transportation program funded almost exclusively from user fees protected by the California Constitution (gasoline taxes and weight fees), we now have a program dependent primarily on motor fuel sales taxes, without constitutional protection. ... The elimination of the state transportation construction program over the past two years is unprecedented, the result of a basic structural problem in California's system of transportation financing.” (CTC 2004 Annual Report)

As a result of the Proposition 42 funds not materializing, the 2004 STIP cycle included no new funding and local cities and counties did not receive funds for the maintenance and rehab of local streets and roads. Another issue is the rising construction costs that are a result of supply and demand for steel, oil, and other raw materials used for construction. An unstable source of transportation funding makes it extremely difficult for a local jurisdiction to adequately plan and deliver local projects.

The Financial Element of the RTP is intended to discuss the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element of the Nevada County Regional Transportation Plan Update.

The Action Plan calls for an extensive list of improvements over the horizon of the RTP. As is true in other areas of the State, there are not enough existing Federal, State, or local resources to fund all of the improvements necessary.

The RTP Financial Element presents a constrained funding scenario made up of the revenue which is reasonably expected to be available from existing funding mechanisms currently in place over the horizon of the RTP, including projections of the future STIP, and federal transportation funds. The RTP also discusses potential local revenue sources. Nevada County's transportation problems affect the local and regional travel demand and will require Federal, State, and local funding solutions to provide better access, mobility, and service for residents and visitors.

Estimated improvement costs for the actions recommended to meet the identified needs exceed the projected funding available for transportation projects in Nevada County. Revenue projections indicate shortfalls in funding for improvements to the following transportation system components:

- ◆ State Highways/Regional Roadways
- ◆ Transit
- ◆ Rail Transportation

Air Quality

On June 15th 2004, the Environmental Protection Agency (EPA) designated western Nevada County as a "non-attainment" area under the Federal 8-hour ozone national air quality standard. The standard is designed to protect the public from exposure to ground-level ozone. Ozone is unhealthy to breathe, especially for people with respiratory diseases, and for children and adults who are active outdoors. The 8-hour ozone standard is based on averaging air quality measurements over 8-hour blocks of time. The EPA uses the average of the annual fourth highest 8-hour daily maximum concentrations of ozone from each of the last three years of air quality monitoring data to determine a violation of the ozone standard.

Isolated rural non-attainment areas are required to complete a Transportation Conformity Analysis/Determination when a federal approval is required on a regionally significant transportation project. The "Conformity" finding must show that the project, along with all of the regionally significant Federal and non-Federal transportation projects, does not create new violations of the National Ambient Air Quality Standards (NAAQS), increase the severity of NAAQS violations, or delay timely attainment.

Non-attainment areas are also required to prepare and submit a SIP no later than three years after the date of designation. The SIP is an air quality plan developed by the California Air Resources Board, in cooperation with local air districts, to attain and maintain Federal Clean Air Act Standards. The SIP for western Nevada County will identify all sources of emissions of pollutants that exceed federal standards in the non-attainment area and detail the strategies the area will utilize to meet the NAAQS. The SIP for our region will be incorporated into a statewide SIP that will outline the measures that the state will take in order to improve air quality in non-attainment areas.

The Northern Sierra Air Quality Management District (NSAQMD) is working in conjunction with the NCTC and California Air Resources Board to prepare an air quality attainment plan for western Nevada County. NSAQMD is charged with the responsibility to attain and maintain the state and federal ambient air quality standards, and depend upon local ordinances and/or public education and voluntary programs to prevent the deterioration of ambient air quality.

The RTP seeks to reduce air quality issues associated with future planned growth by increasing the efficiency of the transportation system and increasing alternative transportation options. Transportation control measures applicable to Nevada County are discussed in the TSM/TDM section of this report.

♦ **Coordination of Land Use, Air Quality, and Transportation Planning**

Land use planning is a major element of providing effective transportation, particularly in light of the projected increase in population, housing and employment needs, which can be expected in the future. Transportation corridors and right-of-way must be protected through the General Plan and zoning processes. In addition, land use decisions and policies on local and regional transportation alternatives can affect the region's air quality. Continued coordination between land use and transportation planning will result in more efficient use of the existing transportation system, and will help to mitigate both traffic and air quality impacts.

♦ **Providing and Maintaining a Transportation System that Enhances Safety, the Efficient Movement of all People, Goods, Services, and Information, and Environmental Quality.**

Needs contained in this update are a result of past trends and future trend forecasts. Past trends indicate that Nevada County has experienced a high population growth rate. According to the California State Department of Finance population forecasts, a moderately high growth rate is expected to continue. In order to adequately accommodate future travel demand associated with the planned growth for Nevada County, improvements to the transportation system are needed.

One of the big challenges that Nevada County will face over the coming years will be the increasing need to continue to provide transportation services for elderly persons, especially those who are in the potentially frail elderly population.

♦ **Support New Technologies**

As new technologies come on line, it is important to establish a base level of research and development in the region to determine how new technology can be appropriately applied to the transportation issues that exist in Nevada County. Regions that do not recognize the importance of utilizing technological innovations, will have fewer funding and improvement options than those that keep pace with advanced transportation opportunities.

GOALS, OBJECTIVES, PERFORMANCE MEASURES, AND POLICIES

An important element of the regional transportation planning process is the development of valid and appropriate goals, objectives, performance measures, and policies. The RTP Guidelines define goals, objectives, performance measures, and policies as follows:

- ◆ A **goal** is general in nature and characterized by a sense of timelessness. It is something desirable to work toward, the end result which effort is directed.
- ◆ An **objective** is a measurable point to be attained. They are capable of being quantified and realistically attained considering probable funding and political constraints. Objectives represent levels of achievement in movement toward a goal. Objectives are linked to the short-range (10 year) and long-range (20 year) transportation implementation goals listed below.
- ◆ The scale by which the attainment of an objective is measured is defined as a **performance measure**. Performance measurement involves examining the performance of the existing system, as well as, forecasting the performance of the future planned system. By examining the performance of the existing system over time, the NCTC can monitor trends and identify regional transportation needs that may be considered when updating the RTP. The purpose of performance measurements is to clarify the link between transportation decisions and eventual outcomes, thereby improving the discussion of planning options and communication with the general public. In addition, they can assist in determining which improvements provide the best means for maximizing the system's performance within the given budget and other constraints.
- ◆ A **policy** is a direction statement that guides decisions with specific actions.

Goal	1.0	Provide for the safe and efficient movement of all people, goods, services, and information.
Objective	1.A	Program improvements to the transportation system which: (Short-range) <ul style="list-style-type: none">◆ Reduce accident rates. <i>Performance Measure: State and local accident statistics for Nevada County.</i>◆ Reduce travel time required for the movement of persons, goods, and information. <i>Performance Measure: NCTC Traffic Model travel time outputs.</i>◆ Maintain levels of service adopted by local jurisdictions. <i>Performance Measure: Freeway segment directional capacities compared with peak hour directional volumes. Level of Service on local roadways will be determined in specific traffic studies.</i>◆ Support the policies of the local general plans. <i>Performance Measure: Proposed transportation improvements will be reviewed to ensure consistency with the goals, objectives, and policies of adopted General Plans.</i>
Policies	1.1	Transportation facilities should be compatible with adjacent land uses.
	1.2	Construction of additional streets and roads with public funds should be secondary to improving, maintaining, and realigning the existing streets and roads.
	1.3	Private development/activities should be required to mitigate their impact on

		public transportation facilities.
	1.4	Work with both the public and private sectors to enhance transit, ridesharing, telecommuting, and other means of increasing vehicle occupancy and reducing congestion on the regional roadway network.
	1.5	Program improvements that support the planned development of the region in a coordinated manner within the framework of the local general plans.
Goal	2.0	Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.
Objective	2.A	Development of the transportation system should be consistent with management and conservation strategies of regional resources contained in the General Plans. (Long-Range) Performance Measure: Proposed transportation improvements will be reviewed to ensure consistency with the goals, objectives, and policies of adopted General Plans.
Policies	2.1	Establish and protect "scenic highways" in accordance with local general plans.
	2.2	The adverse environmental impacts of each transportation improvement should be fully analyzed prior to implementation, and either totally avoided or mitigated to a level of insignificance as defined under CEQA or a statement of overriding considerations approved.
	2.3	Assist the Northern Sierra Air Quality Management District with the development of transportation control measures that will be needed to meet the required emission reductions of the California Clean Air Act.
	2.4	Assist in the implementation of transportation control measures as requested by the cities of Grass Valley and Nevada City, the Town of Truckee, and Nevada County.
Goal	3.0	Develop an economically feasible transportation system.
Objectives	3.A	Minimize the capital costs of transportation improvements and operating costs of transit services. (Short-range) Performance Measure: When planning transportation improvements, analyze cost effectiveness of alternatives. Monitor transit statistics and recommend implementation measures to reduce operating costs.
	3.B	User charges should recover as much of the cost as possible and still provide the service. (Short-range) Performance Measure: Monitor and update the Regional Transportation Mitigation Fee Capital Improvement Program as needed. Monitor transit system farebox recovery ratios.
Policies	3.1	Support innovative alternative transportation improvements that provide equivalent solutions or benefits at a reduced cost compared to accepted standard improvements.
	3.2	Seek and develop alternative funding sources for transportation improvements.
	3.3	Require new development and private sector activities to fully mitigate their impacts to the transportation system through the provision of streets and roads, transit, pedestrian, and bicycle facilities as planned by local agencies.
	3.4	Encourage local governments to use their traffic fines and forfeitures as a match to Surface Transportation Program funds by awarding additional points to the score of proposed projects that have local matching funds.

	3.5	Transit and paratransit operations should strive to achieve a goal of 16 % farebox return (percent of total operating expense offset by fares collected), and should seek to achieve a higher percentage whenever possible.
	3.6	Support federal legislation increasing funds available for transit system operating expenses by formal resolution and petitioning local representatives in Congress.
	3.7	Co-sponsor, with cities, town, and county, a local initiative to increase revenues for the development of a balanced transportation system that reflects the goals of the region.
	3.8	Encourage responsible agencies to consider formation of assessment districts for assisting in the financing of projects and programs included in the Regional Transportation Plan, when feasible.
	3.9	Facilitate the equitable distribution of Surface Transportation Program funds among the County of Nevada, Town of Truckee, and cities of Grass Valley and Nevada City.
	3.10	The fares on all public transportation systems should be set to minimize the subsidy per ride, provided the amount of the fare does not cause major reductions in ridership.
	3.11	Support state budget appropriations consistent with the adopted Nevada County Regional Transportation Improvement Program.
	3.12	Support continued return of fair share of motor vehicle fuel taxes to local agencies in Nevada County.
	3.13	It is the policy of the Nevada County Transportation Commission to withhold Transportation Development Act fund allocations to a local entity, if the entity's proposed expenditures are not in conformity with the Regional Transportation Plan.
Goal	4.0	Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.
Objectives	4.A	Reduce dependence on the automobile. (Short-range) <i>Performance Measure: The number of pedestrian and bikeway projects implemented, as well as, transit ridership statistics and Census Journey-to-Work Mode Split Data.</i>
	4.B	Emphasize mass transit, ridesharing, telecommuting, and pedestrian and bicycle travel as alternatives to the automobile. (Short-range) <i>Performance Measure: Develop and conduct a program to inform the public about alternative forms of transportation.</i>
	4.C	Program those improvements to the streets and road system that are appropriate with the local general plans. (Long-term) <i>Performance Measure: Transportation improvements will be reviewed to ensure consistency with the goals, objectives, and policies of adopted General Plans.</i>
Policies	4.1	Existing general aviation facilities should be maintained and improved. Participate with the State in development of the California Aviation System Plan as a means of planning for future development of aviation facilities.
	4.2	Encourage increased passenger service on existing rail lines by participation in regional rail studies and seeking improvements to existing rail transportation facilities within the County.

- 4.3 Encourage improved pedestrian facilities in high density areas.
- 4.4 Continue public participation processes to determine the need for new and enhanced transportation facilities.
- 4.5 Encourage transit services along the Highway 49 Corridor as recommended in the *Nevada County Corridor Management and Rail Feasibility* studies.
- 4.6 General public transportation services should be maintained and improved within Grass Valley, and between Grass Valley and Nevada City.
- 4.7 Specialized transportation services directed for the elderly and handicapped should be maintained and improved in Nevada County.
- 4.8 Coordinate with local transportation management associations and other appropriate agencies to improve existing Transportation System Management and Transportation Demand Management Programs.
- 4.9 Annually adopt "Unmet Transit Needs Findings" in accordance with Section 99401.5 of the Public Utilities Code.

The objectives and policies contained under the main goals of the Regional Transportation Plan correspond with the following goals, objectives, and policies contained in the General Plans of Nevada County, Grass Valley, Nevada City, and the Town of Truckee:

RTP Goal 1.0 Provide for the safe and efficient movement of all people, goods, services, and information.

1995 Nevada County General Plan: Goal 4.1, Objective 4.1, Goal 4.2, Objective 4.2, Objective 4.11

City of Grass Valley 2020 General Plan: 2-CG, 3-CG, 4-CG, 13-CO

Nevada City General Plan 1980-2000: Circulation Objective 3, Circulation Policy 4

Town of Truckee General Plan 1995-2014: Circ 1.19, Circ 1.20, Circ. 1.4, Circ. 1.6

RTP Goal 2.0 Reduce adverse impacts on the natural, social, cultural, and historical environment and the quality of life.

1995 Nevada County General Plan: Goal 4.2, Goal 4.4, Objective 4.16, Policy 4.37, Policy 4.38, Policy 4.39

City of Grass Valley 2020 General Plan: 3-CG, 10-CO, 15-CP, 21-CP, 26-CP

Nevada City General Plan 1980-2000: Circulation Goal 1

Town of Truckee General Plan 1995-2014: Circ 2.3, Circ 1.16, Circ 4.5

RTP Goal 3.0 Develop an economically feasible transportation system.

1995 Nevada County General Plan: Policy 4.9, Objective 4.4, Policy 4.11, Policy 4.33, Policy 4.34

City of Grass Valley 2020 General Plan: 2-CO

Nevada City General Plan 1980-2000: Circulation Policy 5

Town of Truckee General Plan 1995-2014: Circ 1.14, Circ 1.15, Circ 3.3

RTP Goal 4.0 Create and maintain a comprehensive, multi-modal transportation system to serve the needs of the County.

1995 Nevada County General Plan: Objective 4.6, Objective 4.7, Goal 4.3, Objective 4.12, Policy 4.26, Policy 4.27, Policy 4.28, Objective 4.13, Policy 4.29, Objective 4.14, Objective

4.15, Policy 4.35

City of Grass Valley 2020 General Plan: 1-CG, 1-CO, 3-CO, 1-CP, 2-CP, 6-CP, 7-CP, 8-CP

Nevada City General Plan 1980-2000: Circulation Policy 1

Town of Truckee General Plan 1995-2014: Circ 1.9, Circ 3.4, Circ 3.5, Circ 3.6, Circ 4.2, Circ 5.2, Circ 5.3, Circ 5.5, Circ 5.6, Circ 7.1, Circ 8.1

IV. ACTION ELEMENT

PURPOSE

The purpose of the Action Element is to identify the short-term (2005-2015) and long-term (2016-2027) needs of the regional transportation system in Nevada County.

Each of the following components of the regional transportation system and issues are addressed individually, including:

- ◆ Regional Road Network
- ◆ Goods Movement
- ◆ Transit Services
- ◆ Non-Auto Facilities
- ◆ Intelligent Transportation Systems
- ◆ Transportation Systems Management
- ◆ Air Transportation
- ◆ Rail Transportation
- ◆ Air Quality

REGIONAL ROAD NETWORK

The network of roadways that facilitate the movement of people and goods within and through Nevada County is one of the most important components of the overall transportation system. This section of the RTP identifies the regionally significant roadways and the improvements that will be required over the horizon of the Plan. Roadways are determined to be of regional significance if they meet one or more of the following criteria:

- ◆ Roadways of statewide significance
- ◆ State or interstate highways
- ◆ Principal arterials connecting Nevada County with other regions or counties
- ◆ Rural arterials connecting two or more urbanized areas
- ◆ Roadways that provide access to significant commercial, industrial, recreational, or institutional activity centers

The network of local roadways provides access to all areas of Nevada County, and each one is an important part of Nevada County's transportation system. However, the RTP seeks to identify deficiencies and propose solutions for local roadways that are of regional significance, connecting population centers with commercial, industrial, recreational, or institutional activity centers. The roadways in Nevada County are categorized into the following classifications based on the type of use and volume of traffic:

- | | |
|-----------------------------------|---|
| ◆ Interstates and Freeways | Limited access highways. |
| ◆ Principal Arterials | Major roadways providing access from rural to urban areas and access to freeways. |
| ◆ Minor Arterials | Streets providing through service to industrial and commercial areas and between cities and/or providing access to highways and freeways. |

- ◆ **Major & Minor Collectors** Streets that collect traffic from local streets within residential areas.
- ◆ **Locals** Streets whose primary purpose is to provide access to individual properties.

Figure 2 displays the functional classification of roadways in Nevada County (See page 20).

Analysis of Regionally Significance Roadways

The NCTC maintains a travel demand forecasting model covering western Nevada County that includes freeways, highways, major and minor arterials, and major and minor collector roadways. The regionally significant roadways are analyzed with the traffic model based on current and on future travel demand, and provide a basis to identify potential impacts of growth. Land use data assumptions are based on the Nevada County General Plan and the General Plans of Grass Valley and Nevada City. Growth projections are based on General Plan zoning, County Assessor parcel data, historical, and projected population statistics from the California Department of Finance.

In 2004, the City of Grass Valley completed the *Street System Master Plan for the City of Grass Valley*. The purpose of this study was to examine the transportation improvement projects that will be needed during the planning period of *City of Grass Valley 2020 General Plan* and to identify funding sources.

In 2001 the NCTC, working with the Nevada County Department of Transportation and Sanitation, completed the *Brunswick Corridor Study*. The purpose of this study was to develop a specific corridor plan for Brunswick Road between the Brunswick Basin and State Route 174. As a part of this work effort, traffic conditions along the corridor were analyzed for existing and 20 year projections, and this information was used to design the ultimate configuration needed for the corridor.

In 2001 the NCTC managed a study process that defined the regional transportation investments needed to accommodate the forecasted growth in western Nevada County, and identified the financial resources needed to pay for the investments. The County of Nevada and the cities of Grass Valley and Nevada City participated in these studies at both the policy and technical levels. The study resulted in the development and adoption of the Regional Transportation Mitigation Fee Program.

The Town of Truckee also maintains a travel demand forecasting model that is utilized to identify the need for potential transportation improvements in the area, based on the Town's General Plan and historical and projected growth projections. The Town of Truckee has identified the transportation improvements projects that will be required for the regionally significant roadways in the Truckee area.

Figure 2 Cover

Figure 2-1

Figure 2-2

Figure 2-3

Figure 2-4

State Highways

State highways in Nevada County are the backbone of the region's roadway system, connecting the major population centers within the county, and connecting the county with other regions throughout the State. All of the State highways in Nevada County are regionally significant. The State highways in Nevada County include:

Interstate 80 (I-80) is a major route on the Federal Interstate System that runs in California from its western limits in the San Francisco Bay area to the eastern California/Nevada Border. It continues eastward outside of California toward the northeastern United States and terminates in New Jersey. As one of three major all-weather trans-Sierra routes in the winter (others include U.S. 50 and California 88), Interstate 80 is always busy with commercial traffic, tourists, skiers, commuters, and others. Interstate 80 crosses the Donner Summit, one of the highest points on the freeway, and then descends into Truckee, a gateway to scenic Lake Tahoe. Passing by a few small towns, Interstate 80 enters Nevada just east of Farad.

State Route 49 (SR 49) runs north/south and is a principal arterial for Nevada County, connecting the cities of Grass Valley and Nevada City with I-80 in Auburn to the south. It is the lifeline for much of Nevada County's freight and lumber traffic and also provides access to recreational attractions. To the west of Nevada City, this route continues in a northerly direction to the Nevada/Yuba County line.

State Route 20 (SR 20) connects the City of Grass Valley with Yuba County to the west of Grass Valley and continues north of Nevada City, connecting to I-80. The highway portion between SR 20 to the west of Grass Valley and SR 20 north of Nevada City is signed as a shared SR 49/20, and is a principal arterial. This shared route is named the "Golden Center Freeway" between Route 49 south of Grass Valley and SR 20 north of Nevada City.

State Route 174 (SR 174) extends approximately 13 miles northward from I-80 near Colfax in Placer County to SR 20 in Grass Valley. This route is a minor arterial and serves mostly local rural residential populations and some regional traffic traveling to the Grass Valley or Nevada City area. SR 174 is also an alternative connection to I-80 for residents in the Grass Valley and Nevada City area.

State Route 89 (SR 89) is a north/south route, which serves as a key facility for interregional travel. From I-80 in Truckee heading south, SR 89 provides the primary access to the Tahoe Basin's North/West Shore, as well as Squaw Valley and Alpine Meadows. SR 89 to the north of I-80 provides a connection to Sierra County.

State Route 267 (SR 267) is a north/south undivided two-lane conventional highway 12.69 miles in length that connects I-80 near Truckee to SR 28 near Kings Beach in Placer County. The route is of local and regional significance providing access to residential, commercial, industrial, and recreational land uses and serves inter-regional, local commuter, and recreational traffic traveling between the Tahoe Basin, Martis Valley, Truckee, and I-80.

Interregional Road System "High Emphasis Routes" and "Focus Routes"

There are currently eighty-seven Interregional Road System (IRRS) routes in State statute. They are a subset of the existing two hundred forty-nine State highway routes that serve the interregional movement of people and goods. Due to the large number of routes and capacity improvements needed on the IRRS, the 1990 IRRS Plan identified thirteen of eighty-seven routes as being most critical IRRS routes, and identified them by the term "High Emphasis Routes". The term "High Emphasis," and the priority for improvements to routes in that category, continue as a basis for common and understood usage between Caltrans and regional agencies. Interstate 80 is classified as a "High Emphasis" route and has been designated by Caltrans in the Interregional Transportation

Strategic Plan as a gateway.

The IRRS and High Emphasis Routes are incorporated into both Caltrans system planning for long-range highway improvements, and in most regional transportation plans and planning processes. Focus Routes are a subset of the thirty-four High Emphasis Routes. The routes represent ten IRRS corridors that should be of the highest priority for completion to minimum facility standards in the twenty-year period. Completion of the Focus Routes to minimum facility standards will assure a statewide trunk system is complete for higher volume interregional trip movements. Focus Routes will serve as a system of high volume primary arteries to which lower volume and facility standard State highway routes can connect for purposes of longer interregional trips and access into statewide gateways. Focus Routes assure rural connectivity for the north state, and otherwise connect the fastest growing urbanized areas and urban centers to a trunk system. State Routes 20 and 49 are both designated as High Emphasis and Focus Routes in the interregional road system.

REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (RTIP) PRIORITIES

WESTERN NEVADA COUNTY

1. Dorsey Drive Interchange

Need and Purpose

This project when completed will provide a direct access to high use sites, specifically the Nevada County Sierra College Campus, Sierra Nevada Memorial Hospital, and the Litton Hill development. Currently, the above mentioned sites gain access from SR 20 using the existing adjacent interchanges at Brunswick Road and Idaho-Maryland/East Main Street compounding congestion experienced from the retail/commercial developments at these locations. This project will benefit the overall regional circulation by helping to alleviate congestion in the Brunswick Basin and East Main Street corridors and reduce the delay time at these existing adjacent interchanges.

Current and Future Regional Improvement Program (RIP)/Local Funding

NCTC currently has \$1.2 million programmed to complete the Project Approval and Environmental Documentation (PA/ED) phase of this project, \$2.4 million for preparation of Plans, Specifications, and Estimates (PS&E), \$6.0 million for Right-of-Way (R/W) Capital, \$1.1 million for R/W Support, \$6.1 million for Construction Capital, \$1.5 million for Construction Support. The currently programmed revenues include \$16.8 million of RIP funds and \$1.5 million of Regional Transportation Mitigation Fee Program funds.

The NCTC views this project as one of its top priorities and wishes to see this project advanced as fast as possible. The NCTC has worked with Nevada City, Grass Valley, and Nevada County to adopt a Regional Transportation Mitigation Fee Program that will provide local funding for this project. Caltrans is scheduled to complete the PA/ED by July of 2006 and will then begin working on the PS&E and R/W components. Given the current shortfall of programmed construction capital dollars for this project, the NCTC is currently exploring opportunities with Caltrans to phase the construction of this project. Current estimates place the construction cost at approximately \$16.9 million. These estimates indicate a shortfall of approximately \$9.5 million in the construction capital component of this project. Programming additional construction capital dollars to facilitate completion of this project continues to be one of the highest priorities in future STIP cycles.

2. State Route 49 Widening - Placer County to Grass Valley

Need and Purpose

SR 49 is the major roadway connecting Grass Valley and Nevada City with I-80 in Auburn to the south. It is the lifeline for much of Nevada County and is utilized by freight and lumber traffic, commuters, and recreational traffic. Growth forecasts for the corridor indicate that traffic congestion and delays will only increase if SR 49 in Nevada County is not improved. Existing Level of Service (LOS) on this highway operates near failing at several segments during peak periods. Upgrading the existing roadway to four lanes and a continuous left-turn lane will provide adequate capacity for future traffic demand, and improve the LOS. The planned consolidation of access points into a series of frontage road systems should reduce the number of accidents and improve operational problems.

In the 2000 STIP, the California Transportation Commission made a commitment to Nevada County by approving the partnering of RTIP and ITIP funding to complete the first phase of the SR 49 widening from just south of the Bear River to Wolf-Combie Roads. This section was completed in 2004, ahead of schedule and under-budget, and has substantially reduced congestion and improved the safety along this section.

The NCTC in partnership with Caltrans has currently programmed the second phase of this project from just north of Alta Sierra Drive to just south of Wellswood Way near Grass Valley. Due to growth in the area and several residential communities in the immediate vicinity, this segment experiences operational problems during the peak period and a number of serious accidents have occurred as motorists attempt to enter onto the highway.

As a part of this project, the intersection of La Barr Meadows Road and SR 49 will be relocated to the south and signalized. Highway widening from two to four through lanes to the north and south of the new intersection and turn pockets at the intersection are needed to provide adequate storage and provide for left turn movements. The numerous driveways and private road accesses to the highway will be consolidated by a system of frontage roads that will provide greatly improved access to the highway at the new signalized intersection and improve safety. This project will also provide improved access to SR 49 for emergency vehicles from the fire station south of La Barr Meadows Road that are often delayed for significant periods of time attempting to enter the highway.

This route is listed as a high travel priority route in the District 3 System Management Plan, and high priority routes are targeted for improvements in order to reduce deficiencies of greatest concern. Caltrans SR 49 Concept Report also identifies the widening of SR 49 as a priority project and has a goal to have the project completed by 2010.

SR 49 is classified as a Federal Aid Primary (FAP) route, and it is part of the Interregional Road System (IRRS) established by Senate Bill 300 (Kopp 1989) and is designated as a High Emphasis and Focus Route in the interregional road system.

Current and Future RIP/Interregional Improvement Program (IIP) Funding

The NCTC in partnership with Caltrans has \$9.05 million of RIP funding combined with a \$9.05 million of ITIP match from Caltrans programmed for this phase of the SR 49 widening and breaks down as follows: \$3.5 million programmed to complete the Project Approval and Environmental Documentation (PA/ED), \$1.3 million for preparation of Plans, Specifications, and Estimates (PS&E), \$7.0 million for Right-of-Way (R/W), \$0.6 million for R/W support, \$4.7 million for Construction Capital, and \$1.0 million for Construction Support.

Subsequent phases of this project continue to be one of the highest priorities in future STIP cycles and NCTC plans to continue to partner funding with Caltrans.

EASTERN NEVADA COUNTY

1. SR 89 South - Widening at the Union Pacific Railroad Grade Separation

Need and Purpose

The current Union Pacific Railroad (UPRR) underpass structure on SR 89 South has long been the subject of discussion regarding its inadequacies. Known locally as the “Mousehole,” this undercrossing predates much of the development of the region, including Squaw Valley and Alpine Meadows ski areas. These resorts gain their major access through the structure. The current two-lane roadway cross-section, approximately 25 feet in width, creates a “bottleneck” for regional traffic, which is most evident at peak periods.

Traffic analysis has indicated that the widening of the “Mousehole” is necessary to ensure that SR 89 can accommodate future traffic volumes. In addition, the SR 89 corridor is also a travel route for bicyclists and pedestrians. The development of an important shopping district to the north (Crossroads Center), coupled by the development of a housing complex to the south, has generated a demand for non-motorized travel through the structure. Pedestrians and cyclists must now walk along the very edge of the travel lane. Pedestrians are often observed to run through the underpass to avoid conflict with cars. They have even been observed climbing up and over the 25-foot high railroad embankment and crossing the tracks at-grade rather than risk walking through the underpass. Additionally, traffic is observed to slow down and even stop in some instances when pedestrians and cyclists are passing through the underpass, causing both a reduction in roadway capacity and an unsafe condition.

Presently oversized loads cannot pass through the “Mousehole”. Overhead clearance is restricted to 14 foot 6 inches northbound and 15 foot southbound. Oversized loads traveling on SR 89 between Tahoe City and I-80 must use West River Street and the at-grade railroad crossing at Bridge Street in downtown Truckee. This re-routing mixes these large trucks with passenger vehicles in an already-congested area, further exacerbating traffic delays downtown and at the grade crossing.

Current and Future RTIP/STIP/ITIP Funding

The NCTC has \$498,000 of RTIP funds programmed for the completion of the Project Approval and Environmental Documentation (PA/ED). The Town of Truckee is the lead agency for this project and had been unable to receive an allocation of the funds for PA/ED from the California Transportation Commission since the time it was programmed in the 2002 STIP cycle, due to the previous allocation freeze. The freeze had been lifted at the time of this report and an allocation of the \$498,000 is anticipated. Also as part of the Federal Surface Transportation Reauthorization bill, SAFETEA-LU, the Town of Truckee received a Federal Earmark in the amount of \$2,827,744 for widening the SR 89 underpass. These funds will be utilized by the Town of Truckee to complete the sequential design and right-of-way work required to advance the project to ready to list. The total estimated cost of this improvement is approximately \$13,000,000 million in 2005 dollars.

REGIONAL ROAD NETWORK CAPITAL IMPROVEMENTS

Table 2 (Page 29) lists the recommended “Financially Constrained” capital improvements, identified through previous and recent analysis, to the regional road network for western and eastern Nevada County and identifies the funding sources. Table 3 (Page 33) lists the “Financially Unconstrained” capital improvements for western and eastern Nevada County that did not have a funding source identified for the capital improvement at the time this report was developed, or are improvements that are anticipated to be funded by future development. In the case of improvement projects identified as a “Developer Funded” in Table 3, a development may be conditioned to pay its fair share towards the accelerated improvement, or if no other developments in the area can be shown to

have a nexus, the development may have to pay the full cost.

Projects may be added, deleted, or revised based on changes in land use, implementation of Transportation Demand Management or Transportation Systems Management strategies, or changes in transportation technology. The projects included do represent an improvement scenario that will yield satisfactory traffic operations within the region. Additional projects of regional significance identified in the future will be amended into the Plan if required for funding and/or included in future updates of the Regional Transportation Plan, as well as, in local improvement programs of the City of Grass Valley, Nevada City, Town of Truckee, and Nevada County as appropriate.

TABLE 2
WESTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST

SHORT TERM IMPROVEMENTS

Short-term improvements are those that can reasonably be expected to be constructed prior to 2015.

Facility	Segment	Improvement	Estimated Cost (\$K)	Funding Source
Brunswick Rd.	Bennett St./Greenhorn Rd.	Signal & Channel	\$277	RTMF
Brunswick Rd.	Old Tunnel Rd.	Signal & Channel	\$225	RTMF
Brunswick Rd.	Loma Rica Dr.	Relocate Intersection	\$1,386 <u>\$1,073</u> \$2,459	RTMF, Nev. Co. Dev. Fee
Brunswick Rd.	Dorsey Dr.	Signal & Channel	\$430	RTMF
Brunswick Rd.	Sutton Way	Intersection Improvement	\$281	RTMF
Combie Rd.	SR 49 to Magnolia Rd.	Improve to 4 Lanes (plus center turn lane)	\$2,100	Nev. Co. Dev. Fee
E. Main St.	Bennett St./Richardson Realignment	Realignment and Signal & Channel	\$1,686	RTMF
E. Main St.	SR 49/Idaho-Maryland Rd./E. Main St.	Intersection Improvements	\$700	RTMF
Magnolia Rd.	Kingston Lane	Left turn pocket	\$250	Nev. Co. Dev. Fee
McKnight Way	Taylorville to Freeman	Widen	\$393	RTMF
McCourtney Rd.	Brighton St.	Signal & Rechannel	\$137	GV Dev. Fee
Mill St.	McCourtney Rd.	Roundabout	\$419	RTMF
Pleasant Valley Rd.	Lake Wildwood Dr.	Signal & Channel	\$200	Nev. Co. Dev. Fee
Rough & Ready Hwy.	Bitney Springs Rd. to Grass Valley City Limits	Center Turn Lane/Turn Pockets	\$600	Nev. Co.
Sierra College Dr.	Ridge Rd.	Signal	\$200	GV Dev. Fee
SR 174	Brunswick Rd.	Signal & Channel	\$400	Nev. Co. Dev. Fee

SR 174	Ophir St.	Signal & Channel	\$125	GV Dev. Fee
SR 20	Colfax Ave/Neal St/South Auburn Ramps	Intersection Improvements	\$562	RTMF
SR 20	Dorsey Dr.	Construct Interchange/Phase 1	\$18,300	RIP, RTMF
SR 20-49 Golden Center Freeway	Idaho-Maryland Rd./SR 20 Ramps/Railroad Ave.	Signal & Channel	\$300	GV Dev. Fee
SR 20-49 Golden Center Freeway	SR 49/Idaho-Maryland Rd./E. Main St.	Convert Idaho-Maryland Rd./E. Main St. onramp to Collector-Distributor Rd. to Bennett off ramp and Freeway	\$6,800	SHOPP
SR 20	Gold Flat Interchange Ramps	Dual Roundabouts	\$281	RTMF
SR 20	EB Ramp at McCourtney Rd.	Signal & Channel	\$250	GV Dev. Fee
SR 20	WB Ramp at Mill St.	Roundabout	\$260	RTMF
SR 20	SB Ramp at Brunswick Rd.	Modify Signal & Rechannel	\$337	RTMF
SR 49	Lady Jane Rd. to Norambagua Ln.	Signal at La Barr Meadows & Channelization	\$18,100	RIP, IIP
SR 49	McKnight Way	Dual Roundabout & Striping	\$815	RTMF
W. Main St.	Church St.	Signal	\$150	GV Dev. Fee
		<i>Constrained List Western Nevada County Subtotal</i>	\$56,947	

WESTERN NEVADA COUNTY FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST

LONG TERM IMPROVEMENTS

Long-term improvements are the projects that can reasonably be expected to be constructed prior to the year 2027

Facility	Segment	Improvement	Estimated Cost (\$K)	Funding Source
La Barr Meadows Rd.	McKnight Way to Dog Bar Rd.	Add 8' Pavement (Shoulder Improvement)	\$1,968	Nev. Co.
Loma Rica Dr.	Brunswick Rd. to Charles Dr.	Add 8' Pavement (Shoulder Improvement)	\$440	Nev. Co.
McCourtney Rd.	Indian Springs Rd. to Old Auburn Rd.	Add 8' Pavement (Shoulder Improvement)	\$2,619	Nev. Co.
McCourtney Rd.	Old Auburn Rd. to SR 20	Improve to 4 Lanes	\$250	GV Dev. Fee
Nevada City Highway	Joerschke Dr.	Signal & Channel	\$169	RTMF
Pleasant Valley Rd.	Donovan Rd.	Signal & Channel	\$200	Nev. Co. Dev. Fee
Pleasant Valley Rd.	Gold Country Estates Dr.	Two-Way Left Turn Lane	\$200	Nev. Co. Dev. Fee
S. Auburn St.	Empire St.	Signal & Channel	\$141	RTMF
SR 20	Dorsey Dr.	Interchange Construction Phase 2	\$5,036 <u>\$4,465</u> \$9,501	RIP, RTMF

SR 49	Combie – Wolf Rd. Intersection	2 nd SB Left Turn Lane, SR 49 to Combie	\$500	Nev. Co. Dev
SR 49	Combie – Wolf Rd. Intersection	Extend the Right Turn Lane at Wolf Rd. & Combie Rd.	\$440	Nev. Co. Dev. Fee
W. Main St.	Alta St.	Signal & Channel	\$165	GV Dev. Fee
		<i>Constrained List Western Nevada County Subtotal</i>	\$16,593	
		Constrained List Total – Western Nevada County	\$73,540	

EASTERN NEVADA COUNTY FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST

SHORT TERM IMPROVEMENTS

Short term improvements are those that can reasonably be expected to be constructed prior to 2015.

Facility	Segment	Improvement	Estimated Cost (\$K)	Funding Source
Bridge Street	Intersection with Donner Pass Rd.	Roundabout	2,000	Traffic Impact Fee
Bridge Street	West River St.	Roundabout	\$2,000	Traffic Impact Fee
Brockway Rd.	Martis Valley Road	Roundabout	\$650	Traffic Impact Fee & Developer Funded
Brockway Rd.	Reynold Way	Roundabout	\$650	Traffic Impact Fee
Donner Pass Road	Along Donner Lake	Widening	\$2,000	Traffic Impact Fee
Glenshire Drive	Dorchester Drive (west)	Add Turn Lanes	\$150	Traffic Impact Fee
Pioneer Trail	Donner Pass Rd.	Roundabout	\$1,000	Traffic Impact Fee
Pioneer Trail Extension/Bridge Street Extension	Northwoods Blvd. south of Lausanne Way & Pioneer Trail & the North End of Bridge St.	Arterial Connection between Northwoods Blvd. and Comstock Drive & Arterial Connection between the Pioneer Trail Extension and the Northern End of Bridge St.	\$11,000	Traffic Impact Fee & Other Funding
SR 267	Brockway Road/Soaring Way Intersection	Roundabout	\$2,000	Traffic Impact Fee
SR 89 North	Donner Pass Rd.	Dual-Lane Roundabout	\$2,000	Developer Funded
SR 89 North	Prosser Dam Rd./Alder Drive	Roundabout	\$2,000	Developer Funded
SR 89 South	Donner Pass Rd./Frates Ln. Intersection	Roundabout	\$1,560	Traffic Impact Fee
SR 89 South	UPRR Grade Separation "Mousehole"	Completion of the PA/ED, PS&E, and Possibly ROW. Project will provide additional capacity for vehicles and pedestrians.	\$498 \$2,828 \$3,326	RIP, Federal Ear Mark
West River Street	Riverside Drive to Placer County	Add Shoulders	2,000	Traffic Impact Fee
		<i>Constrained List Eastern Nevada County Subtotal</i>	\$32,336	

**EASTERN NEVADA COUNTY
FINANCIALLY CONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST**

LONG TERM IMPROVEMENTS

Long-term improvements are the projects that can reasonably be expected to be constructed prior to the year 2027

Facility	Segment	Improvement	Estimated Cost (\$K)	Funding Source
Glenshire Dr.	Subdivision to Brockway Rd.	Widening	\$2,500	Traffic Impact Fee
I-80	Donner Pass Rd. Eastern Interchange intersection	Roundabout or Traffic Signal at both access Ramps	\$2,500	Traffic Impact Fee
SR 267	I-80 WB Ramps	Roundabout	\$2,000	Traffic Impact Fee
SR 267	I-80 EB Ramps	Roundabout	\$2,000	Traffic Impact Fee
West River St.	McIver Crossing Intersection	Roundabout	\$1,500	Traffic Impact Fee
		<i>Constrained List Eastern Nevada County Subtotal</i>	\$10,500	
		Constrained List Total – Eastern Nevada County	\$42,836	
		CONSTRAINED TOTAL TABLE 2	\$116,376	

TABLE 3

**WESTERN NEVADA COUNTY
UNCONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST**

SHORT TERM IMPROVEMENTS

Short-term improvements are the projects that can reasonably be expected to be necessary prior to the year 2015

Facility	Segment	Improvement	Estimated Cost (\$K)	Funding Source
Centennial Dr.	Bennett St.	Centennial Connector Rd.	\$1,000	Developer Funded
Dorsey Dr.	Dorsey Dr. to Brunswick Rd.	Extension of Dorsey Dr.	\$750	Developer Funded
Dorsey Dr.	SR 49/20 to Sutton Way	Widen to 4 Lanes	\$1,000	Developer Funded
Dorsey Dr.	Sutton Way to Brunswick Rd.	Widen to 4 Lanes	\$2,500	Developer Funded
Dorsey Dr.	Sutton Way	Signal & Channel	\$150	Developer Funded
Hughes Rd.	Ridge Rd. to Main. St.	Add 8' Pavement	\$912	To Be Determined (TBD)
LaBarr Meadows Rd.	McKnight Way to Dog Bar Rd.	Add 8' Pavement	\$1,968	TBD
McCourtney Rd.	Indian Springs Rd. to Old Auburn Rd.	Add 8' Pavement	\$2,619	TBD
Nevada City Highway	Banner-Lava Cap Rd.	Intersection Improvements	\$505	TBD
Ridge Rd.	Alta St.	Signal	\$200	TBD
Ridge Rd.	Rough & Ready Hwy. to Alta St.	Signal or Roundabout	\$600.	Developer Funded
SR 49	Crestview Dr. Intersection	Construct Interchange & North/South Connector Road	\$55,000	Developer Funded
SR 174	Brunswick Rd.	Signal	\$150	TBD
Zion St.	Ridge Rd.	Intersection Improvements	\$150	TBD
		<i>Unconstrained List Western Nevada County Subtotal</i>	\$67,504	

**WESTERN NEVADA COUNTY
UNCONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST**

LONG TERM IMPROVEMENTS

Long-term improvements are the projects that can reasonably be expected to be necessary prior to the year 2027

Facility	Segment	Improvement	Estimated Cost (\$K)	Funding Source
W. Main St.	School St.	Intersection Improvement	\$150	TBD
W. Main St.	Squirrel St.	Intersection Improvement	\$150	TBD
W. Main St.	One-Way Couplet (Main/Neal St. or Main/Richardson St.)	Couplet	\$2,500	TBD
SR 20	Pleasant Valley Rd. to SR 49	Improve to 4 Lanes	\$11,400	RIP, IIP
SR 49	Combie to McKnight	Improve to 4 Lanes (Plus Continuous Left Turn Lane)	\$72,000	RIP, IIP
SR 49/20	Empire (Interchange)	Increase Capacity	\$5,500	TBD
		<i>Unconstrained List Western Nevada County Subtotal</i>	\$91,700	
		Unconstrained List Total –Western Nevada Co.	\$159,204	

**EASTERN NEVADA COUNTY
UNCONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST**

SHORT TERM IMPROVEMENTS

Short-term improvements are the projects that can reasonably be expected to be necessary prior to the year 2015

Facility	Segment	Improvement	Estimated Cost (\$K)	Funding Source
East River RR Undercrossing	Connecting Brockway Rd. to East River St. and Glenshire Dr.	Connection and Railroad Undercrossing Between Railyard Master Plan area and East River St. Including upgrading of East River St. and possible closure of Bridge St. Railroad Crossing	\$6,000	Developer Funded & Traffic Impact Fee
Glenshire Dr.	Realignment (Donner Pass Rd./Glenshire Dr.)	Connection Between the Western End of Glenshire Dr. and Church St.	\$3,000	Traffic Impact Fee & Other
I-80/Donner Pass Rd. (Western Interchange)	Cold Stream Rd. Intersection	Intersection Improvements at WB Ramps & Roundabout at EB Ramps	\$2,000	Developer Funded
I-80	Truckee River Bridge to the Nevada State Line	“Truckee River Canyon Project” improves narrow winding section, adds truck climbing lane, and new pavement	\$205,000	SHOPP
SR 89	UPRR Grade Separation “Mousehole”	Construction of Improvement. Provide additional capacity for vehicles and pedestrians	\$9,674	TBD
		<i>Unconstrained List Eastern Nevada County Subtotal</i>	\$229,000	

**EASTERN NEVADA COUNTY
UNCONSTRAINED REGIONAL TRANSPORTATION PROJECTS LIST**

LONG TERM IMPROVEMENTS

Long-term improvements are the projects that can reasonably be expected to be necessary prior to the year 2027

Facility	Segment	Improvement	Estimated Cost (\$K)	Funding Source
SR 267	Between Placer County and Brockway Rd.	Additional NB and SB Through Lanes	\$1,500	Traffic Impact Fee & Other
		<i>Unconstrained List Eastern Nevada County Subtotal</i>	\$1,500	
		Unconstrained List Total –Eastern Nevada Co.	\$230,500	
		UNCONSTRAINED TOTAL – TABLE 3	\$389,704	

GOODS MOVEMENT

Goods movement covers the transportation methods by which freight and commodities are transported into and out of Nevada County. Goods movement is critical to the continued economic health of Nevada County and the State of California. Maintaining an efficient transportation system that provides for effective goods movement allows local business to transport goods to within Nevada County, as well as, to markets outside of the area and allows them to bring in materials and finished products into the area.

Trucking

Trucks account for the majority of goods movement in Nevada County. It provides end delivery service for every other long-haul mode. The common practice of “just in time delivery” has made trucking the freight mode of choice. Fast delivery reduces on-site warehousing and allows retail outlets and other businesses to cut back on their inventory. Trucking has outperformed rail for this part of the market, because trucks can make faster deliveries directly to businesses. In Nevada County Interstate 80 and State Routes 20, 49, 174, and 89 are all vital good movement facilities. Improvements to these facilities will be critical to ensure effective goods movement within Nevada County and across the State of California.

Package Delivery

Over the years package delivery and courier services have become established in Nevada County. These services are responding to a need to move small parcels around the urban area and to outlying areas of the county. Fast delivery time is often very important in the decision to use these services.

Air Freight

The Nevada County Air Park and the Truckee Tahoe Airport do not serve as hubs for air cargo service. The Chico, Redding, Sacramento, and Reno Airport facilities provide a full compliment of cargo services to the northern California area.

Freight Movement by Railroad

Union Pacific Railroad owns and operates tracks that follow Interstate 80 along the southern border of Nevada County. Although the Union Pacific Railroad lines run through a portion of eastern Nevada County there are currently no rail freight loading and unloading opportunities in Nevada County. As congestion increases on Interstate 80 in the future, the provision of rail freight loading and unloading facilities in eastern Nevada County will need to be considered.

GOODS MOVEMENT NEEDS ASSESSMENT

Traffic Congestion

Whether products are shipped by rail, ship, air, or truck, regional highways and local roads are very likely to be used for some part of the trip. Freight movement by truck suffers from congestion on the roadway system, which delays deliveries and therefore may cause some economic loss to shippers. Truck traffic mixing with automobile traffic contributes to congestion, and can pose safety and operational problems on the freeways. Traffic congestion on the Interstate and State Highways in Nevada County affects the timely flow of goods, and increases in truck traffic during commute hours

exacerbates peak period traffic congestion. Therefore, securing State transportation funding for the planned improvements to these facilities in Nevada County will continue to be a priority.

GOODS MOVEMENT ACTION PLAN

Short-Term

- ◆ Maximize the use of the existing goods movement infrastructure of the region.
- ◆ Protect the transportation infrastructure from deterioration.
- ◆ Consider facilities that minimize conflicts between trucks and other vehicles.
- ◆ Implement improvements that will maintain an acceptable level of service.

Long-Term

- ◆ Improve or increase goods movement modes available to the county.

TRANSIT SERVICES

The NCTC is the regional planning agency responsible for allocating Transportation Development Act (TDA) funds, conducting the annual unmet transit needs process, and preparation of Transit Development Plans. Transit Development Plans are generally regarded as the primary short-term planning guideposts for smaller transit systems, and set a policy framework by which the County's mobility needs are identified and met.

The demand for transit and paratransit services is expected to increase. As demand increases it will be important for the growth of these services to be monitored and measures taken to ensure funding is available to meet transit needs that are determined to be reasonable to meet. Additional transit facilities and services will need to be provided, where feasible, in key locations in the County to accommodate as much of the travel demand as possible. Transit services must be affordable, comfortable, convenient, and reliable. The benefits of increased transit ridership are reduced congestion and improved air quality.

WESTERN NEVADA COUNTY

Transit services in western Nevada County are provided through a Joint Powers Agreement executed between Nevada County, the City of Grass Valley, and Nevada City. The Nevada County Transit Services Division (TSD) is responsible for the operation and management of the two public transit systems in western Nevada County. The Transit Services Commission (TSC) is a seven-member policy board that has the following powers and duties:

- ◆ To establish fares.
- ◆ Approve level of service.
- ◆ Monitor public response.
- ◆ Provided recommendation on proposed purchase of additional vehicles.
- ◆ Oversee on a regular basis and advise as necessary on the daily operations of the transit system, in conjunction with public response, to make the proper adjustments in the program in order to serve the public with maximum efficiency and service.
- ◆ Review and make recommendations to TSD staff regarding the annual budgets for transit and paratransit operations.
- ◆ To recommend to the County to apply for grants for usual operation and/or for demonstration or study projects.

The two public transit systems operating in western Nevada County are as follows:

- ◆ **Gold Country Stage** is the fixed route system serving the cities of Grass Valley and Nevada City, the adjacent unincorporated sections of the County, and portions of Placer County.
- ◆ **Gold Country Telecare, Inc.** is a nonprofit organization contracted with by the County to provide demand response paratransit service for disabled residents in western Nevada County. Telecare provides both local trips and out-of-county non-emergency medical trips.

Fixed Route Transit Service

The following descriptions summarize the fixed route services available.

Gold Country Stage

The Gold Country Stage is a fixed route transit system that connects population, commercial, and employment centers throughout western Nevada County. The system was formed through a Joint Powers Agreement (JPA) between the two incorporated cities and the County of Nevada. The Nevada County Transit Services Division operates the service utilizing a fleet of 14 buses and six support vehicles. Gold Country Stage's entire fleet of buses are wheelchair accessible, equipped with wheelchair lifts, and bike racks.

Gold Country Stage operates a total of twelve routes that serve the Nevada City/Grass Valley area, the unincorporated area of western Nevada County, and provide regional connections to Placer County. Two transfer points exist in the service area: at the National Hotel on Broad Street in Nevada City, and at the intersection of Church and Neal Streets in Grass Valley. Gold Country Stage buses will pick-up and drop-off passengers at signed bus stops in the "urban" areas, although flag-stops are allowed in the rural areas. Service is provided on weekdays from 7:00 A.M. to 6:30 P.M., and on Saturdays from 9:30 A.M. to 5:30 P.M. Limited service is provided on Martin Luther Kings's Birthday, Presidents Day, Veteran's Day, and the day after Thanksgiving. Except for Route 5X, no service is provided on Sundays, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Days and time of service are subject to change and are shown above for general information.

The fixed route system is designed on a combination of coverage and productivity goals that seek to provide the level of service that can be reasonably financially supported to each part of the service area. More frequent and direct service is provided to areas that generate higher ridership, while retaining other routes to provide coverage where needed.

Description of Gold Country Stage Routes

Time transfers occur at Church and Neal Streets in Grass Valley and at the National Hotel in Nevada City. A description of each route follows:

Route 1 - Nevada City (Mon.-Sat.)

Route 1 provides service to downtown Grass Valley, the Fowler Center, Seven Hills, downtown Nevada City, the Nevada County Health, Education, and Welfare Center, and the Eric Rood Administrative Government Center.

Route 2 - Ridge Road (Mon.-Sat.)

Route 2 provides service to downtown Grass Valley, Nevada Union High School, Seven Hills, Pioneer Park, and downtown Nevada City.

Route 3 - Grass Valley Loop (Mon.-Sat.)

Route 3 provides service to downtown Grass Valley, the Nevada County Fairgrounds, Senior Center, Pine Creek Center, Grass Valley (K-Mart Center), and Memorial Park.

Route 4 - Brunswick Basin (Mon.-Sat.)

Route 4 provides service to downtown Grass Valley, the Sierra College Nevada County Campus, Sierra Nevada Memorial Hospital, Glenbrook Center, Gold Country Center, and the Fowler Center.

Route 5 - Auburn via Hwy 49 (Mon.-Sat.)

Route 5 is an intercity service, linking Nevada City and Grass Valley with Auburn, via the Highway 49 Corridor. This route provides service to the Eric Rood Administrative Government Center, downtown Nevada City, downtown Grass Valley, Alta Sierra, Higgins Corner, Lake of the Pines,

Bear River High School, Rock Creek Plaza, and the Auburn Amtrak Depot. Route 5 passengers can transfer to and from Placer County Transit, Auburn Transit, and Amtrak/Capitol Corridor trains at the Auburn Amtrak Depot.

Route 5X - Hwy 49 Express (Mon.-Sun.)

Route 5X is an intercity express route to Auburn Amtrak Depot funded by the Capitol Corridor Joint Powers Authority, which provides a direct connection to Auburn for commuters who wish to catch the Amtrak Capitol Corridor trains.

Route 6 - Penn Valley (Mon – Sat.)

Route 6 provides service to downtown Grass Valley, Lyman Gilmore Middle School, Rough & Ready, Penn Valley, and Lake Wildwood.

Route 8 - Loma Rica (Mon.–Sat.)

Route 8 provides service to downtown Grass Valley, Whispering Pines, Pride Industries, and the Nevada County Airport/Nevada County Transit Services Division office.

Route 10 - North San Juan (Mon.–Sat.)

Route 10 provides service to downtown Grass Valley, downtown Nevada City, the Eric Rood Administrative Government Center, South Yuba River State Park, North Columbia, North San Juan, Peterson's Corner.

Route 11 - Squirrel Creek Loop (Mon.–Sat.)

Route 11 provides service to downtown Grass Valley, Condon Park, and Lyman Gilmore Middle School.

Route 12 - Colfax (Mon.–Sat.)

Route 12 provides service to downtown Grass Valley, Union Hill School, Cedar Ridge, Peardale, Chicago Park, Colfax Amtrak, and Colfax Greyhound.

Paratransit Services

The Nevada County Transit Services Department is responsible for the transit system administration in western Nevada County and contracts with Gold Country Telecare, Inc. to provide demand response paratransit services.

Gold Country Telecare, Inc.

Gold Country Telecare, Inc. provides demand response paratransit service for the developmentally and physically disabled in western Nevada County. In order to become eligible for paratransit service, one must submit a request for Certification of ADA Paratransit Eligibility. This form is available on the County of Nevada's website.

Gold Country Telecare, Inc. commonly provides trips to senior lunch and enrichment programs at the Senior Center for adult day care, local medical trips, and general transportation. Transportation vouchers funded by Area 4 Agency on Aging are available to assist low-income seniors 60 years old and older. The paratransit service area includes the Grass Valley/Nevada City urban area, as well as, the communities of Penn Valley, Rough and Ready, Lake Wildwood, Cedar Ridge, and Alta Sierra. Volunteer drivers provide service mainly for out-of-county trips to medical appointments. Reservations for paratransit trips must be made at least 24 hours in advance, and may be made up to 14 days in advance of the trip. Out of county trips should be arranged at least five days in advance.

Gold Country Telecare, Inc. provides service from 7:00 a.m. to 6:30 p.m. Monday through Friday. Saturday service is provided between the hours of 9:30 a.m. to 5:30 p.m. Hours are subject to change. Gold Country Telecare also offers supplementary programs to qualified passengers. These include T.H.E VAN PROGRAM, Senior Voucher program, Sunday Senior Rides, and Neighbor-to-Nighbor Volunteer Driver Program. Days and time of service are subject to change and are shown above for general information.

Gold Country Telecare, Inc. was designated a consolidated transportation service agency by the NCTC in August of 2000. Community Transit Service funds were allocated to Gold Country Telecare for the purchase of a wheelchair accessible vehicle to provide paratransit service to primary preventive health services and related enrichment programs for seniors and disabled paratransit riders that live outside of the ADA corridor. Operating revenue for this program were made possible through a Catholic Health West Community Grant.

Telecare's fleet is comprised of two large buses, 3 mid-size buses, five small buses, five modified-vans, and a company staff vehicle. All of the buses and modified-vans are wheelchair accessible and are designed to transport at least two wheelchair patrons. Volunteer drivers use their own vehicles.

EASTERN NEVADA COUNTY

Eastern Nevada County has provided a variety of public transit services since 1991. The Town of Truckee began operating transit services after its incorporation in March 1993, by contracting with the private sector for transit management, supervision, vehicle maintenance, and operations. There are three public transit systems operating in eastern Nevada County:

- ◆ **Truckee Trolley** is the primary fixed route transit system serving the Town of Truckee and portions of Placer County and is provided by the Town of Truckee through a contract with Aztec Transportation.
- ◆ **Truckee Dial-A-Ride** is the demand response transportation service for the elderly and disabled, as well as, the general public in the Town of Truckee and is also provided through a contract with Aztec Transportation.
- ◆ **"The Bus,"** provides fixed route service between the Town of Truckee and Tahoe City via SR 89 and is operated by Placer County's Tahoe Area Regional Transit (TART).

The Town of Truckee performs direct oversight of transit services provided in eastern Nevada County. Day-to-day operations are provided under contract. Placer County operates the TART Truckee to Tahoe City service.

A regional organization important to transportation in eastern Nevada County is the Truckee North Tahoe - Transportation Management Association (TNT/TMA). This non-profit public-private partnership provides a framework for private sector participation in solving traffic congestion and air quality problems in the greater Truckee-North Tahoe-Incline Village Resort Triangle. Established in 1989, the TNT/TMA has been instrumental in garnering support from employers, property owners, and residents in establishing the Truckee-Tahoe City bus service, as well as, the Truckee Trolley service.

Fixed Route Transit Services

Truckee Trolley

The Truckee Trolley is a public-private partnership between the Town of Truckee and several private organizations. Three routes are operated during the winter months: Route A operates between Sugar Bowl Ski Area and downtown Truckee, Route B operates between Northstar-at-Tahoe Ski Resort and downtown Truckee, and Route C operates between Kings Beach and Northstar-at-Tahoe Ski Resort. These routes operate seven days per week from roughly 7:00 A.M. to 7:00 P.M. In non-winter months, one bus is operated Monday through Saturday between downtown Truckee and the west end of Donner Lake between roughly 9:00 A.M. and 5:00 P.M.

Public-private partnerships, such as the Northstar-at-Tahoe Ski Resort paying for employees and guest riders from both Truckee and Kings Beach to its resort, result in the high farebox recovery for the Truckee Trolley. To improve the reliability and expand the partnership of the Northstar Route, the North Lake Tahoe Resort Association also participates in the funding of this route. These partnerships have assisted the Town of Truckee in funding and maintaining transit services in the region. With limited funding available for transit operations and ongoing capital replacement needs, it will be important for the Town of Truckee to continue to build upon the public/private partnerships in eastern Nevada County.

The TART Truckee-Tahoe City Service “The Bus”

Tahoe Area Regional Transit (TART) operates the Truckee-Tahoe City transit service, known as "The Bus". The service has been operating between Truckee and Tahoe City since December of 1991. Since the route serves two different counties, the Town of Truckee contributes a portion of the funding, with Placer County funding the remaining operating costs. Service is provided hourly December through mid-April during the winter peak season and then every two hours during the off-peak season. The route stops at shopping areas along Donner Pass Road, Squaw Valley, and Alpine Meadows. "The Bus" does not go into Squaw Valley or Alpine Meadows, but drops off passengers at the ski area entrances where they can transfer to the ski area shuttles. Riders traveling from the Truckee area can transfer for free to other TART routes in Tahoe City or the North Shore Trolley if they want to continue to other areas along the north and south shores.

Paratransit Service

Truckee Dial-A-Ride Service

The Town contracts with Aztec Transportation for operations of the Truckee Dial-A-Ride program. The Truckee Dial-A-Ride is a general public demand response service that operates Monday through Friday from 8:00 A.M. to 5:00 P.M. Days and time of service are subject to change. Passengers are asked to make reservations by 5:00 P.M. the previous service day, though same-day requests are accommodated when possible. The Town of Truckee owns all three vehicles that are leased to Aztec Transportation to operate this service; two vehicles are used during peak periods. Only two of the three vehicles are wheelchair-accessible. The Town of Truckee has implemented some innovative practices to integrate the Dial-A-Ride and Truckee Trolley. Dial-A-Ride is considered an "extension" of the fixed route service, covering the outlying suburbs that are not served by the Trolley. The fare policy encourages fixed route transit use by offering a free transfer to either the Truckee Trolley going to Kings Beach or the TART Bus to Tahoe City. The dispatch policy also supports fixed route transit. When the dispatcher receives a call, he/she first checks to see if the trip can be made on the fixed route transit, either completely or partially. If so, those options are offered before making a door-to-door reservation.

Transit Planning

Five-Year Transit Development Plans (TDP) are an important planning tool used to analyze the current transit services and provide recommendations on improvements necessary to meet future demand. In 2003, TDPs were completed for western and eastern Nevada County. The major issues facing both western and eastern Nevada County transit and paratransit services were that rising operating costs coupled with the need to replace aging vehicle fleets over the period of the plan were outpacing the projected revenues. In order to insure that transit and paratransit services would be financially sustainable over the plan period the consultants recommended modifications to routes, elimination of unproductive services, reducing the paratransit coverage area, fare increases, and additional contributions from private partners.

In 2005, NCTC hired a consultant firm to complete a study that examined the different governance structures commonly used for the provision of transit and paratransit services in California, and provide a recommendation for western Nevada County. The consultants examined Nevada County's transit system governance and costs, and compared it to other peer transit systems of similar size, as well as, industry norms. The consulting team recommended a shift to a staffed Joint Powers Authority. The fundamental reason for this recommendation was they felt that it would create a more streamlined governance structure, and that there may be potential long-term savings. The current Joint Powers Agreement members, Nevada City, Grass Valley, and Nevada County, are currently discussing the possibility of shifting to the recommended governance model in the future.

The demand for transit and paratransit services is expected to increase. As demand increases it will be important for the growth of these services to be monitored and measures taken to ensure funding is available to meet transit needs that are determined to be reasonable to meet. Additional transit facilities and services will need to be provided, where feasible, in key locations in the County to accommodate as much of the travel demand as possible. Transit services must be affordable, comfortable, convenient, and reliable. The benefits of increased transit ridership are reduced congestion and improved air quality.

Tables 4 and 5 below display the fiscal year 2004/05 operating information for each of the specialized paratransit services and fixed route transit services in Nevada County.

TABLE 4
SPECIALIZED TRANSIT SERVICE OPERATIONS, 2004/05 DATA

Transit Service	Ridership	Operating Costs	Revenue	Farebox Recovery
Gold Country Telecare(Prof. & Volunteer Data Combined)	43,828	\$810,105	\$95,210	11.8%
Truckee Dial-A-Ride	16,543	\$208,140	\$20,333	9.7%

TABLE 5
FIXED ROUTE TRANSIT SERVICE OPERATIONS, 2004/05 DATA

Transit Service	Ridership	Operating Costs	Revenue	Farebox Recovery
Gold Country Stage	245,881	\$1,688,720	\$201,656	11.9%
Truckee Trolley	41,823	\$251,649	\$96,230	38%

Farebox recovery is one of several methods typically used to analyze the performance of transit services. The farebox recovery ratio reveals the percentage of operating costs that are paid directly by the passengers. Transit operators who make claims under Article 4 of the Transportation Development Act in rural counties such as Nevada County are required to maintain a minimum farebox recovery ratio of 10 %. The NCTC has set a goal of 16 % farebox recovery ratio for all transit services within Nevada County.

Capital Replacement Needs

The Nevada County Transit Services Division anticipates the need to replace approximately three fixed route transit buses annually at a cost of approximately \$240,000. Western Nevada County is forecasted to receive a minimum of approximately \$800,000 in Congestion Mitigation Air Quality funding annually, which may address the replacement of fixed route transit vehicles. Gold Country Telecare, the paratransit provider in western Nevada County, anticipates the need to replace two paratransit buses annually at a cost of \$90,000. Gold Country Telecare intends to continue to utilize Federal Transit Administration 5310 grant funding to meet the ongoing needs. Over the next five years, the Town of Truckee is planning to replace two Truckee Dial-A-Ride vehicles in Fiscal Year 2006/07 at a cost of \$160,000, and two Truckee Trolley 30 passenger buses at a cost of \$300,000 utilizing Local Transportation Funds.

TRANSIT SERVICES ACTION PLAN

Short-Term

1. Conduct marketing efforts to promote the use of both the fixed route and paratransit services in western Nevada County. (Transit operators)
2. Monitor transit services regularly and make adjustments to routes and schedules as needed. (Transit Operators, Transit Services Commission)
3. Continue to obtain public input on the fixed route and paratransit services by holding annual unmet transit needs workshops and hearings. Implement expanded services that are determined reasonable to meet as feasible. (NCTC, transit operators, jurisdictions, Transit Advisory Committee, Social Services Transportation Advisory Council)
4. Implement and/or modify paratransit services to continually meet the requirements of the Americans with Disabilities Act. (Transit operators, Transit Services Commission)
5. Annually budget for vehicle replacement to build a reserve to meet the capital replacement needs of the fixed route transit fleet. (Transit operators)
6. Continue efforts and incentives that encourage paratransit users who are able to utilize the fixed route transit system to do so. Transitioning paratransit riders who are able to use fixed route service is in the interest of both the rider and the transit system, since fixed route services offer a higher level of mobility at a lower per trip subsidy than paratransit services. Transit ambassador programs or other types of travel training that encourages this transition should be considered for Nevada County. (Transit operators)
7. Continue to seek public/private partnerships to assist in providing transit and paratransit services in Nevada County. (Transit operators)

Long-Term

1. Update the short range transit plans for the transit operators with continued emphasis on meeting the transit needs of the growing and changing population within the constraints of available funding. (NCTC, transit operators, jurisdictions, TSC)

2. Work with the transit operators to develop long range plans as needed – with a focus on capital and infrastructure needs. (NCTC, transit operators, jurisdictions)

NON-AUTO FACILITIES

Non-Auto Facilities Planning Activities

Although bicycle, pedestrian, and equestrian trails have been planned for Nevada County, the number of existing trails have been limited by physical/funding constraints. In Nevada County, on-street parking in downtown areas, narrow roadways, limited right-of-way, and topographical constraints make planning these types of facilities challenging and proposed projects are often very expensive. As the County grows, some bicycle and pedestrian facilities will be completed as part of future development and road improvement projects. Most pedestrian and bicycle projects will be constructed through funding available from Federal and State sources. Public funds have been used to construct nearly all of the existing facilities in urbanized areas of the County.

In 2001, the County of Nevada Department of Transportation completed the Nevada County Non-Motorized Transportation Master Plan. This plan identifies future commute, sidewalk, and safe route to school facilities to be implemented in Nevada County. It also identifies some general corridors to be studied for possible development of recreational trails.

In April 2002, the *Truckee Trails and Bikeways Master Plan* was completed by the Town of Truckee. This long-range planning document focused on both recreational trails and on-street bikeways to create a framework for the creation of a town-wide system. The Plan will be used as a tool to guide the incremental development of specific recreational trail segments and on-street bikeways as resources and opportunities arise.

The *Grass Valley Parks and Recreation Master Plan* completed in 2001 developed a planning level trail/sidewalk framework of potential future improvements. This study also recommended the establishment of trails/linear parkway along the Wolf Creek corridor. The City of Grass Valley is currently in the process of completing a planning study focused on developing a concept and alternatives for the potential future development of a trail and parkway along the Wolf Creek corridor.

The NCTC will be incorporating the information from the planning efforts listed above and input from citizens and the local jurisdictions into the next update of the *Nevada County Bicycle Master Plan*. NCTC will be applying for a Transportation Planning Grant for the 2006/07 FY funding cycle to accomplish the update of the *Nevada County Bicycle Master Plan* and to develop a comprehensive countywide non-motorized trails plan. The *Nevada County Bicycle Master Plan* is a countywide plan that focuses on bicycle transportation/commute facilities with a focus towards the urbanized areas of the County. Figure 3 (page 50) displays typical cross sections of the different classes of bike lanes.

Implementation of projects within the *Nevada County Bicycle Master Plan* would increase the quantity of non-auto trails in Nevada County, which have the greatest potential to serve as an alternative mode of transportation. However, due to the County's topography, weather, and long travel distances related to rural development patterns, non-auto trails cannot be expected to significantly reduce automobile dependency or use, except in urbanized areas. Information from updates to the Bicycle Master Plan will be included in future Regional Transportation Plans.

Existing Transportation Oriented Non-Auto Facilities

- ◆ ***Mount Olive Bike Path*** is a Class I path adjacent to Mount Olive School near Lower Colfax Road. (see page 50 for description of the different classes of bike paths)
- ◆ ***Magnolia School Trail*** is a short path that serves school students along Magnolia Road.
- ◆ ***Penn Valley Bike Path*** is a Class I path that runs from Western Gateway Regional Park to the corner of Penn Valley Drive and Spenceville Road.

- ◆ **East Main Street** has a Class II bike lane between Hughes Road and Brunswick Road.
- ◆ **Ridge Road** has a Class II bike lane from Alta Street to the Nevada City Highway.
- ◆ **Nevada City Highway** has a Class II bike lane from Gold Flat Road to Gates Place.
- ◆ **Litton Trail** is a 3/5-mile paved trail between Sierra College Drive and Hughes Road in Grass Valley. The Nevada County Land Trust extended the trail adding another mile of dirt trail around the meadow and wooded edges of the Sierra College campus, returning to Sierra College Drive. Given its location, the new trail provides an important pedestrian link to Nevada Union High School and Ridge Road. Future links through the Eskaton Project and Glenwood Road developments are being explored.
- ◆ **Donner Pass Road** has a Class II bike lane from the I-80 overpass at Cold Stream to the I-80 overpass at downtown Truckee.
- ◆ **Multiple Use Truckee River Crossing** is a cement bridge crossing the Truckee River between East River Street and the Truckee Regional Park.
- ◆ **Truckee River Legacy Trail** is a multi-use trail planned along the Truckee River from SR 89 to the Glenshire subdivision. Phase 1 was finished in the Fall of 2001 and runs from the stoplight on Brockway Road to the bridge at the end of East River Street. Phase 2 of the project, between the Truckee River Regional Park and the newly constructed Truckee Sports Park facility, was officially opened in September 2004.
- ◆ **Combie/Magnolia Multipurpose Path** project proposes to construct a path on Combie Road eventually extending to SR 49 and improving an existing section of trail along Magnolia Road that runs from West Hacienda Way eastward past the Bear River High School to the elementary school. The project will also close an approximate 400-foot gap that exists in the path just before the elementary school and adjacent to a ballpark.

Existing Recreational Non-Auto Facilities

- ◆ **South Yuba Trail** is a recreational trail that extends 4 miles from Purdon Crossing to Edwards Crossing and the South Yuba Campground, where it extends 15 miles to the Town of Washington.
- ◆ **Independence Trail** is a 2 mile recreational trail adjacent to Highway 49, north of Nevada City, with access for the disabled.
- ◆ **Scotts Flat Trail** is a 50 mile recreational trail that crosses both Forest Service and private property. It serves Upper Burlington Ridge, Deer Creek Forebay, Indian Springs, and Towle Mill.
- ◆ **Nugget Trail** is a recreational trail that extends approximately 50 miles to the Sierra County line. It also crosses both Forest Service and private property.
- ◆ **Emigrant Trail** is a historic trail of regional significance extending through the entire County.
- ◆ **Pioneer Trail** parallels Highway 20 east of Nevada City. Approximately 15 miles are complete, with plans for an extension to the Pacific Crest Trail.
- ◆ **Missouri Bar Trail** is a recreational trail that extends north of Highway 20 across the South Yuba River.
- ◆ **Wildwood** is a proposed equestrian center and trail system of approximately 20 miles near Lake Wildwood.

- ◆ ***Empire Mine State Historic Park*** has a trail system of approximately 10 miles SR 49 and SR 174 in Grass Valley.
- ◆ ***Pacific Crest Trail*** is a north-south trail extending from Canada to Mexico through the eastern portion of the County.

Most of these trails are oriented towards recreational use and do not provide practical alternatives for auto transportation within the urbanized areas of Nevada County, but may be linked in the future to transportation oriented trails if opportunities exist.

Non-Auto Facility Needs

Bicycle ridership and pedestrian activity levels are not easily measured or projected for an entire county without extensive data collection efforts. The concept of “demand” for these facilities is difficult to measure. A common term used in describing demand is “mode split”. Mode split refers to the form of transportation a person chooses to take, be it walking, bicycling, using public transit, or driving. Mode split is often used in evaluating commuter alternatives such as bicycling, where the objective is to increase the “split” or percentage of people selecting an alternative means of transportation. The 2000 Census data for Nevada County identifies the journey-to-work mode split information for workers sixteen years old and over.

As shown in Table 6 (page 49), less than one percent of home-based work trips for Nevada County residents are made by bicycle, and approximately three percent are pedestrian trips. However, the census data does not include trips from home-to-school in the data set. This is important because home-to-school trips occur during the same morning peak travel hours as typical commuter trips. Since many children walk or ride bicycles to school, the actual number of bicycle and pedestrian trips during the morning peak hour is slightly higher than shown. All of the Gold Country Stage vehicles are now bike-rack equipped, and this provides the opportunity for transit patrons to utilize the transit services as a “bike-ride” mode of transportation.

Nevertheless, the limited amount of pedestrian facilities and bikeways in Nevada County may be discouraging residents from walking and bicycling. Several factors influence the decision to bicycle or walk, the most prevalent factor is the perception of a lack of safe facilities. In order for non-motorized transportation to be a viable transportation option, it must be safe, attractive, and easy to utilize. Generally this includes use of pathway design techniques that promote safety and eliminate barriers, and the placement of paths in sufficient location and numbers to connect important activity centers such as schools, commercial centers, parks and residential areas.

TABLE 6
2000 CENSUS JOURNEY-TO-WORK MODE SPLIT

Mode (Home-based work trips)	Nevada County
Drive Alone	75.4%
Carpool	12.7%
Public Transportation	0.7%
Bicycle	0.3%
Walk	2.7%
Worked at Home	7.5%
Other	0.5%

U.S. Census Bureau 2000 Census

NON-AUTO FACILITIES ACTION PLAN

Short-Term

1. Develop a bicycle master plan that can be incorporated into the planning, construction, and maintenance activities of Nevada County, Grass Valley, Nevada City, and Truckee. *(NCTC, jurisdictions)*
2. Submit an application for a FY 2006/07 Transportation Planning Grant to update the Nevada County Bicycle Master Plan and a countywide non-motorized trails plan. *(NCTC, jurisdictions)*
3. Create a bikeway system that is cost-effective to construct, maintain, and minimizes the potential for conflicts with other types of vehicles, and places a priority on facilities that serve areas with the greatest demand. *(NCTC, jurisdictions)*
4. Solicit and consider community input in the design and location of bikeway facilities. *(NCTC, jurisdictions)*

Long-Term

1. Encourage future development to dedicate the right-of-way for off street bikeways with connections to future planned facilities outside of the development in mind. *(Jurisdictions)*
2. Apply for State and Federal grants to implement non-auto facilities in Nevada County. *(Jurisdictions)*
3. Develop a coordinated approach to implementing and maintaining bicycle facilities between Nevada County, Grass Valley, Nevada City, Truckee, Placer County Transportation Planning Agency, and the Tahoe Regional Transportation Planning Agency. *(NCTC, jurisdictions, Placer County Transportation Planning Agency, Tahoe Regional Transportation Planning Agency)*

Figure 3 Bikeway Classifications

INTELLIGENT TRANSPORTATION SYSTEMS

Overview

Intelligent Transportation Systems (ITS) involves the integration of communication and information technologies into the transportation system in order to make the most efficient use of existing transportation infrastructure. The successful implementation of ITS programs and technologies is essential to ensure that all modes of travel remain as safe and efficient as possible.

The Transportation Equity Act for the 21st Century (TEA-21) seeks to accelerate the integrated deployment of ITS through the use of regional ITS architectures. This has caused the incorporation of ITS into regional transportation planning to take on a much greater emphasis. This greater emphasis requires that a region's ITS projects and a region's ITS architecture be consistent with one another and consistent with the requirements of the National ITS Architecture and Standards.

Intelligent Transportation Systems Needs Assessment

The Placer County Transportation Planning Agency coordinated an ITS planning effort for the four counties which comprise the Tahoe Gateway Planning Area (Nevada, El Dorado, Placer and Sierra). In 2002, the *Tahoe Gateway Counties ITS Strategic Deployment Plan* (SDP) was adopted by the four Regional Transportation Planning Agencies. The implementation of ITS technologies will be aimed at improving safety and enhancing the capacity of the existing transportation facilities through more effective management and operation of the transportation system. ITS applications will be included to address the unique aspects of the rural environment where challenges include rapid changes in weather, limited alternative routes, and difficulties in developing effective communication systems.

The following list summarizes the high priority need areas in the Tahoe Gateway Region (in random order):

- Enhanced traveler information within and beyond project boundaries
- Improved cooperation and coordination among transportation agencies and others
- Improved traffic flow and system operation monitoring
- Advanced technology uses to more effectively and efficiently operate traffic signal systems
- Coordinated, efficient transit and public transportation systems
- Coordinated incident/emergency management plans and procedures (including HAZMAT)
- Improved traveler safety
- Enhanced access and availability of tourist information
- Accurate, early traffic information to commercial vehicle operators
- Active fleet management of State/locally owned highway maintenance vehicles
- Improved integration of information and systems to better manage the transportation assets

INTELLIGENT TRANSPORTATION SYSTEMS ACTION PLAN

Short-Term

1. Maximize the operating efficiency of the existing surface transportation system. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans)*
2. Improve the safety of travel into, through, and out of the Tahoe Gateway Region. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans)*
3. Ensure that accurate and reliable traveler information regarding traffic and weather conditions is available to those entering the region, as well as those traveling within the region. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans)*
4. Provide more effective and convenient transit services. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, transit operators).*
5. Ensure efficient commercial vehicle operations into, through, and out of the Tahoe Gateway Region. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans)*
6. Ensure the long-term viability of ITS in the Tahoe Gateway Region. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, FHWA)*
7. Develop an ITS program that is compatible and supported by National ITS efforts. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*

Long-Term

1. Continue coordination and implementation (deployment, operations, and maintenance) of ITS elements in the Tahoe Gateway Counties. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*
2. Continue regional ITS management via each member County, neighboring regions, and other agencies, organizations, and individuals. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*
3. Mainstream or incorporate ITS technologies into the planning process as stand-alone projects and/or as part of larger transportation projects. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*
4. Ensure that a Regional ITS Architecture Maintenance Plan is maintained and implemented. *(NCTC, El Dorado County, Placer County, Sierra County, jurisdictions, Caltrans, SACOG, FHWA)*

TRANSPORTATION SYSTEMS MANAGEMENT

Well planned, cost-effective transportation operations and management actions can improve mobility, safety, and productivity of the system for transportation users in Nevada County. Transportation Systems Management (TSM) is often used interchangeably with Transportation Control Measures (TCM) and Transportation Demand Management (TDM) to describe a series of techniques designed to maximize the efficiency of the existing transportation system. The emphasis of these methods are to reduce traffic congestion, delay the need for new and expensive transportation improvements, reduce the dependence on single occupant vehicles, and improve air quality. These methods generally employ techniques that are low-cost measures to reduce travel demand or improve the utilization of the existing transportation infrastructure.

TSM strategies focus on increasing the efficiency, safety, and capacity of existing transportation systems through techniques such as facility design treatments, access management programs, targeted traffic enforcement, and Intelligent Transportation Systems (ITS). TCMs are focused on reducing air pollution through techniques such as alternative fuel vehicles. TDM addresses traffic congestion by reducing travel demand rather than increasing transportation capacity. Specifically, TDM actions attempt to modify travel choices and alter relative transportation prices for different travel decisions. TDM actions and programs are implemented through both the public and private sectors. The Truckee/North Tahoe Transportation Management Association in eastern Nevada County, as a public/private partnership, is uniquely positioned to coordinate implementation of TDM programs.

Transportation Systems Management Strategies

Traffic Flow Improvements

Roadway re-striping, channelization, auxiliary lanes, elimination of on-street parking, pavement markings and signage to communicate lane utilization, and computerized signalization are techniques currently used to improve the flow of traffic without new road construction. Roadway re-striping seeks to increase the number of lanes by reducing lane width, thus increasing traffic capacity. Channelization, which is often done in conjunction with re-striping, adds turn lanes to busy roadways to eliminate traffic backups behind cars trying to make turns. Computerized signalization seeks to coordinate signal timing to smooth traffic flow.

Transit

Public transit service is an alternative mode of transportation that is utilized in Nevada County by residents who commute to work and school as well as for shopping, medical, and leisure trip purposes.

Park-and-Ride Lots

The purpose of park-and-ride lots is to provide a central meeting place adjacent or in close proximity to major travel routes where commuters can congregate and form carpools or catch buses for the remainder of the commute trip. There are currently four Caltrans park-and-ride lots located in Nevada County at the following locations:

- ◆ SR 20 at Pleasant Valley Road
- ◆ SR 20 at Penn Valley Drive

- ◆ SR 20/49 at South Auburn St.
- ◆ SR 49 at the Cornerstone Calvary Chapel Church

Ridesharing

The Sacramento Council of Governments (SACOG) manages the Regional Rideshare program covering the counties of El Dorado, Placer, Sacramento, Yolo, Yuba, Sutter, and Nevada. The purpose of the Regional Rideshare program is to encourage the use of alternative transportation options for traveling to work, school, personal trips, and recreation. The Regional Rideshare program has a database of commuters interested in ridesharing (carpools and vanpools) and can be accessed on the internet at <http://www.sacregion511.org/rideshare/index.cfm> or by dialing 511 on your cell phone.

Intelligent Transportation Systems

The Tahoe Gateway ITS Strategic Deployment Plan recommends implementation of several technological improvements that can improve the flow and timeliness of information available to the traveler in order to avoid and/or reduce traffic congestion and delays due to traffic. These regional projects focus on traveler information management, emergency signal system technology, traffic management, and communications.

An example of a regional ITS project is the recently implemented 511 comprehensive traveler information system. The 511 system provides access to information about all modes of travel including: traffic conditions for commuters, bus and light rail information for more than 20 transit agencies, paratransit services for the elderly and disabled, and information about ridesharing and commuting by bike. The telephone service is available in English and Spanish and is accessed by calling 511 on your cell phone. The 511 website contains the same valuable information and can help users plan their daily commutes, access transit providers, and find a carpool partner. Users can check commute options and know road conditions before traveling and reduce congestion. For more information about the 511 service, visit the SACOG website at www.sacog.org.

Transportation Demand Management Strategies

Expansion of Broadband Services

Future expansion of broadband coverage, such as DSL (which provide for a faster and more convenient internet access) could reduce the need for certain types of automobile trips given the growing popularity of e-commerce. Instead of getting in ones car and going to shopping malls and dealing with traffic and the high cost of gasoline, a person may choose to simply stay home and shop online. E-Government and other business websites in Nevada County that allow people to avoid making an automobile trip, by having information accessible online, are also becoming more prevalent.

Telecommuting, Compressed Work Weeks, and Flexible Hours

TDM actions maximize transportation system utilization through modification of travel behavior decisions. Specifically, TDM actions attempt to modify travel choices and alter relative transportation prices for different travel decisions. TDM actions are implemented through both the public and private sectors.

Telecommuting, compressed work weeks, and flexible work hours are employment-based techniques to reduce the number of work trips per week, or to transfer trips to reduce peak hour congestion. Telecommuting, or alternative work locations, allows workers to perform job duties at home or another location, communicating with the main work center by modem, fax, or telephone as necessary. This alternative is especially attractive for workers in rural areas, or those commuting long distances. The addition of new and lower cost technologies, such as DSL, will continue to encourage telecommuting as a TDM strategy.

Teleconferencing

Teleconferencing is generally defined as meetings held by telephone or via video hookup to replace the need for traveling to meet in person. Teleconferencing is a common technique used by employers as a cost-effective way of conducting meetings and avoiding the need to travel.

Alternative Fuels

Alternative fuels are used to power motor vehicles, while reducing the impacts to air quality. Common alternative fuels include methanol, propane, compressed natural gas, and electricity.

Transportation Management Associations

In September of 1998, the Nevada County Business Association, acting as the Western Nevada County Transportation Management Association (WNC/TMA), made the financial decision that it could no longer provide the necessary human resource subsidization to manage the TeleBusiness Center and Employer Trip Reduction Programs. Currently, the WNC/TMA's status remains as inactive. The Nevada County Transportation Commission will continue to work with the Northern Sierra Air Quality Management District (NSAQMD) and other appropriate agencies to promote the implementation of TSM/TDM measures within Nevada County in the absence of the WNC/TMA.

The Truckee North Tahoe - Transportation Management Association (TNT/TMA) in eastern Nevada County, as a public/private partnership, is uniquely positioned to coordinate implementation of TDM programs. The TNT/TMA has taken a leadership role in the development and implementation of TDM strategies in eastern Nevada County, including, but not limited to, ridesharing, vanpooling, and expanded transit.

As the population of Nevada County increases, Transportation Demand Management actions will become increasingly important to ensure efficient utilization of the transportation system, to assist in the achievement of air quality standards. Costs to implement TSM/TDM measures vary widely. Each proposed project will be evaluated for its cost/benefit potential.

TSM ACTION PLAN

Short and Long-Term

1. Work cooperatively with neighboring jurisdictions to implement ITS improvements that would support TSM efforts in the region. (NCTC, PCTPA, EDCTC, TRPA, Sierra County, Caltrans)
2. Encourage increased marketing efforts in Nevada County to increase public awareness of transit opportunities and the benefits on air quality. (NCTC, NSAQMD, Nevada County, Town of Truckee, TNT/TMA)

3. Coordinate with local jurisdictions to identify and implement traffic flow improvements on regionally significant roadways.
4. Improve and expand public transportation systems as feasible through the annual unmet transit needs process. (NCTC, transit operators)
5. Encourage the use of alternative fuels to reduce impacts on air quality as feasible. (NCTC, NSAQMD)
6. Develop and expand facilities to support the use of alternative transportation such as pedestrian and bicycle facilities, park-and-ride lots, and transit transfer stations. (NCTC, jurisdictions, Caltrans)
7. Encourage employers to offer staggered shifts, flexible hours, compressed work weeks, and high occupancy vehicle preferential scheduling. (NCTC, jurisdictions, TNT/TMA, NSAQMD)
8. Encourage employer based carpool programs to increase employee vehicle occupancy through incentives or requirements. (NCTC, jurisdictions, TNT/TMA, NSAQMD)

AIR TRANSPORTATION

Existing Conditions of Air Transportation Facilities

There are two general aviation airports in Nevada County. The Nevada County Air Park, located east of Grass Valley, serves western Nevada County, and the Truckee-Tahoe Airport, located in the Martis Valley, serves eastern Nevada County. The general location of each airport is displayed on Figure 4 (page 63).

The Nevada County Air Park is a small aircraft airport classified in the Airport Reference Code as B-I, meaning it generally accommodates aircraft less than or equal to 12,500 pounds and less than 49 foot wingspan. The *1990 Nevada County Air Park Master Plan* recommended expansion of the Air Park, which included physical improvements to meet future demand, and to correct a line-of-sight distance requirement for aircraft.

The Truckee-Tahoe Airport is classified in the Airport Reference Code (ARC) as a B-II Airport, which handles predominantly small aircraft. As it has the capability to handle larger aircraft due to runway size, plans are to move to an ARC of C-II. This airport is owned and operated by a special airport district, which includes portions of eastern Nevada and Placer Counties.

To protect the public's investment in the Nevada County Air Park or Truckee-Tahoe Airport, aviation easements will be obtained over properties contained within the boundaries of the airport's Comprehensive Land Use Plan, as opportunities present themselves.

Regional Overview

Truckee-Tahoe Airports

Truckee-Tahoe Airport is the primary airport serving the entire north Lake Tahoe region (including Incline Village, Nevada), the Truckee area, and the Donner Summit area of Northern California. The airport is located in a prime year-round recreational area, situated near the center of a 70-square mile area known as the Martis Valley. The valley is bound on the east, south, and west by ridges of the Sierra Nevada Range, which rise in some areas to elevations exceeding 9,500 feet. The elevation of the airfield is 5,900 feet.

The Airport is located approximately two miles southeast of the Town of Truckee, along SR 267, in an area, which serves as a transportation hub for the region. Located along California's eastern border, the area is accessible by Interstate 80, which is the major east-west trans-Sierra highway. The area lies 211 miles east of San Francisco, 114 miles east of Sacramento, 502 miles north of Los Angeles, and 35 miles west of Reno.

Nevada County Air Park

Nevada County Air Park is located in the western end of Nevada County, within five miles from the County's major cities of Grass Valley and Nevada City. The airport lies at an elevation of 3,150 feet in the foothills of the Sierra Nevada Mountain Range. As the sole public-use general aviation airport in western Nevada County, the Nevada County Air Park is both a vital local transportation facility and a key link to the statewide air transportation system.

The area lies 150 miles east of San Francisco, 50 miles east of Sacramento, 450 miles north of Los Angeles, and 95 miles southwest of Reno. Located in the Sierra Nevada foothills, the Nevada County Air Park lies 2.75 miles to the east of State Route 49 and 2.5 miles northwest of SR 174.

Air Passenger Forecast and Trends

The Nevada County Air Park and the Truckee-Tahoe Airport do not provide commercial airline passenger service. The two airports located in Nevada County emphasize recreational, business, and emergency needs.

This lack of local commercial air passenger service in Nevada County forces local area residents to travel to Sacramento, San Francisco, or Reno to access their air travel needs. The desired destination of the air traveler quite often dictates an individual's choice of location to access air passenger service. Economic and time factors are also considerations in selecting commercial air service locations, such as lower fares at the larger airport and scheduling constraints. Consequently, the role of the Nevada County Air Park and the Truckee-Tahoe Airport in the area of air passenger service remains one of a support effort for the larger facilities.

No scheduled airline service has been offered at Nevada County Air Park in the past and no such proposals are currently active. Air taxi service on a non-scheduled charter basis has been and continues to be available through the Airport's fixed base operations.

Truckee-Tahoe Airport is not currently serviced by scheduled airline service; however, the existing runway length, instrument approach capability, and growing local population and economy have potential to attract air service. Considering the proximity of Truckee to Reno, Nevada, any potential airline service would likely be commuter/regional type airline service serving Reno International Airport, although the potential exists for service to other destinations on scheduled or charter basis.

Air Cargo Demand Forecasts and Trends

The Nevada County Air Park and the Truckee-Tahoe Airport do not serve as a hub for cargo service. The Chico, Redding, Sacramento, and Reno Airport facilities provided a full compliment of cargo services to the northern California area.

General Aviation Demand Forecasts and Trends

The Nevada County Air Park and the Tahoe-Truckee Airport are classified as "Regional" General Aviation airport facilities as a result of an airport classification study performed by the State of California Department of Transportation. The operational uses at the two airports are similar. The facilities provide a range of services to general aviation customers. The two airports predominately serve as a base for local personal and recreational flyers, a point of access for personal and recreational visitors to the community, a transportation facility for business/corporate aviation, a place to conduct aviation-related business, and a site for emergency access to the community.

The Nevada County Air Park serves single engine, twin-engine, turbo prop, business jets, based fire attack aircraft and helicopters. Similarly, the Truckee-Tahoe Airport serves single engine, multi-engine, turbo prop, turbo fan, helicopters, business jets and gliders.

The number of aircraft operations and based aircraft at the Nevada County Air Park and the Truckee-Tahoe Airport are projected to increase over the next twenty years as displayed in Tables 7 and 8 (page 59) respectively.

TABLE 7
NEVADA COUNTY AIR PARK ACTIVITY DATA AND FORECASTS

Activity Type	2000	2005	2010	2015	2020
Total Based Aircraft	150	170	187	199	212
Total Aircraft Operations	54,851	62,164	68,015	72,769	77,552

Source: Caltrans, Aeronautics Program. California Aviation System Plan, September 1999.

TABLE 8
TRUCKEE -TAHOE AIRPORT ACTIVITY DATA AND FORECASTS

Activity Type	2000	2005	2010	2015	2020
Total Based Aircraft	118	133	146	156	166
Total Aircraft Operations	40,124	45,509	49,818	53,049	56,550

Source: Caltrans, Aeronautics Program. California Aviation System Plan, September 1999.

Analysis of Aviation Capacity Issues

Nevada County Air Park

The Nevada County Air Park encompasses approximately 117 acres, with a total of 43 hangers, and 128 aircraft tiedowns. The Nevada County Air Park's airfield capacity is calculated at 165,000 to 180,000 annual operations. The operational capacity is well above the projected activity level in the near future.

The Nevada County Air Park's existing runway and taxiway configuration essentially meets the minimum Federal Aviation Administration standards for airports serving aircraft which weigh no more than 12,500 pounds, have maximum wingspans of 49 feet, and have approach speeds of less than 121 knots. For the Airport to regularly accommodate other comparatively large aircraft, the major constraints are the runway length, runway width, and runway-to-taxiway separation distance.

Even if the Nevada County Air Park airfield could be significantly upgraded to properly accommodate larger aircraft, the space to park them is limited by major building area constraints.

Truckee-Tahoe Airport

The 2003 *California Aviation System Plan* lists the Truckee-Tahoe Airport as one of the North State Region's highest priority facilities in terms of system capacity and safety enhancements. The Truckee-Tahoe Airport encompasses 931 acres, with a total of 191 hangars, and paved tiedowns for over 210 aircraft. The existing runway orientations, lengths, widths, and strengths are sufficient to serve the expected mix of powered-aircraft through the 2020 planning period.

To accommodate forecast demand, enclosed T-hangar and conventional hangar space will be required. The number of tiedowns and available apron area should be sufficient for future growth. Additional Jet A fuel storage may be required to maintain an adequate supply of fuel.

The Truckee-Tahoe Airport has been historically located in an area of predominately open space or forested areas. Most urban development is located west and northwest of the Airport towards the Town of Truckee, as well as, southeast of the Airport towards Northstar. However, these new residential developments are being established much closer to airport boundaries than in the past. The Truckee-Tahoe Airport District and the Town of Truckee have entered into a Memorandum of Understanding regarding the future use of property surrounding the Airport.

Future Conditions for Air Transportation Facilities

The Air Park Master Plan analyzed three forms of airport capacity, which included airfield, building area, and environment. The airfield capacity is calculated as being between 165,000 and 180,000 annual aircraft operations. Building area was analyzed by estimating the number of aircraft parking spaces that could be created. With land needed for many of the different airport facilities, parking was calculated to be a maximum of two hundred seventy-five spaces. For environmental capacity, the Master Plan reviewed noise impacts by calculating noise contours and recording noise complaints. The results of the capacity analyses showed that none of the three forms of airport capacity would be exceeded by 2010. Major improvements to the Nevada County Air Park were completed in the spring of 1996 enhancing airport operations.

The Truckee-Tahoe Airport Master Plan was most recently updated in 2001. Total aircraft operations are expected to increase significantly over the next twenty years, which will exceed the current capacity of the airport. Short-term and long-term improvements will be required to accommodate future demand.

The Comprehensive Airport Land Use Plans for both airports identify the common goals of orderly growth of the airports and the areas surrounding the airports within the identified planning boundary, to protect the general welfare of the inhabitants within the vicinity of the airport and the public in general. The airport land use plans have guidelines that identify compatible land uses in the various safety zones. The airport land use plans also identify noise compatibility criteria for development projects within the airport land use planning area. The Nevada County General Plan contains policy recommendations consistent with the Nevada County Air Park and Truckee-Tahoe Airport Comprehensive Airport Land Use Plans.

Air Transportation Facility Needs

It is assumed that the Nevada County Air Park will utilize operating revenues as a local match to leverage California Aid to Airports Program (CAAP) grant funds for completion of its Capital Improvement Plan (CIP) projects. The Tahoe-Truckee Airport generates revenues from operating expenses and special district property tax revenues collected within the Truckee-Tahoe Airport District. It is assumed that the Tahoe-Truckee Airport will utilize operating and property revenues to construct projects included in their CIP and as a local match for the Federal Airport Improvement Program (AIP) or State CAAP grant funding.

AVIATION ACTION PLAN

Short-Term

Short-term capital improvements for both the Nevada County Air Park and Truckee-Tahoe Airport are listed in tables 9 and 10 (page 61), which represent the projects submitted in the most recent airport Capital Improvement Plans that are eligible for funding from State and Federal funding programs.

The Truckee-Tahoe Airport is on track to have California's first Transponder Landing System in the next year or two, depending on delays in the process of installing and testing this new technology.

Long-Term

If demand warrants, consider implementation of improvements identified in both the Nevada County Air Park and Truckee-Tahoe Airport Master Plans final phases. Some of these needs are predicated

on increased demand brought on by future development and population growth. If growth and development do not occur, these improvements may not be required. Both plans recommend long-term improvements to the airfield and the building areas.

Capital Improvement Plans (CIP)

The projects shown in Tables 9 and 10 are currently included in the 2006 to 2010 Capital Improvement Programs for the Nevada County Air Park and Truckee-Tahoe Airport.

**TABLE 9
NEVADA COUNTY AIR PARK CIP LIST**

Project Description	Est. Project Cost \$	Program Year
1. AWOS Phase II Construction	170,500	2006
2. Ramp II, Phase II Construction	670,000	2006
3. Drainage Improvement Engineering	220,000	2006
<i>2006 SUBTOTAL</i>	<i>\$1,060,500</i>	
4. Drainage Improvement Construction	1,430,000	2007
5. Ramp 5 Rehabilitation Engineering	75,000	2007
<i>2007 SUBTOTAL</i>	<i>1,505,000</i>	
6. Ramp 5 Rehabilitation Construction	500,000	2008
<i>2008 SUBTOTAL</i>	<i>500,00</i>	
7. Perimeter Fencing	137,500	2009
<i>2009 SUBTOTAL</i>	<i>137,500</i>	
8. Acquire Land (Lot 6)	550,000	2010
<i>2010 SUBTOTAL</i>	<i>550,000</i>	
TOTAL FIVE YEAR CIP	\$3,753,000	

**TABLE 10
TRUCKEE-TAHOE AIRPORT CIP LIST**

Project Description	Est. Project Cost \$	Program Year
1. Construct Apron for New Terminal & New De-icing Hangar	2,000,000	2006
2. Construct De-icing Hangar	1,600,000	2006
3. Purchase Snow Removal Equipment	350,000	2006
4. Masterplan Update/Part 150 Noise Study	600,000	2006
5. Provide GIS for Airport	110,000	2006
<i>2006 SUBTOTAL</i>	<i>4,660,000</i>	
6. Construct Aprons & Taxi-lanes for New T-Hangars	200,000	2007
7. Construct 16 Nested T-Hangars	1,200,000	2007
8. Reconstruct Portion of Runway 10-28	1,350,000	2007
9. Airfield Security	1,050,000	2007
<i>2007 SUBTOTAL</i>	<i>3,800,000</i>	
10. Construct Taxi-lane & Reconstruct RW 10 Holding Apron	520,000	2008
11. Design of New Terminal Building	350,000	2008
<i>2008 SUBTOTAL</i>	<i>870,000</i>	
12. Construct Terminal Building & Parking Lot	7,000,000	2009
<i>2009 SUBTOTAL</i>	<i>7,000,000</i>	
13. Construct Taxi-lane for New Box Hangars	200,000	2010

14. Construct 6 Box Hangars	1,200,000	2010
<i>2010 SUBTOTAL</i>	<i>1,400,000</i>	
CIP TOTAL	17,730,000	

FIGURE 4 AIR TRANSPORTATION

RAIL TRANSPORTATION

Existing Conditions of Rail Transportation Facilities

Union Pacific Railroad (UPRR) owns and operates tracks that follow Interstate 80 along the southern border of Nevada County (Figure 5 on page 68). The rail line is used for the shipment of goods and people. Currently, Amtrak's California Zephyr serves the San Francisco to Chicago Corridor with a daily train in each direction, through stations in Sacramento, Roseville, Colfax, Truckee, and Reno.

The Truckee Intermodal Transportation Center is an important facility located in eastern Nevada County, which serves transit, rail, automobiles, trucks, bikes, and pedestrians.

Historically, highways are publicly owned, while railroads have been under private ownership. Public funds have been available for public roads, but not for railroads. Only in the last twenty-four years since Amtrak was created, have public funds been available for passenger rail. While passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) improved upon the Interstate Highway Era by making federal funds flexible, the flexibility is limited to urban and commuter transit projects. The ability to provide passenger rail options would be enhanced by implementing a rail development process similar to the highway development process, and fully integrating passenger rail options into transportation problem solving.

Although California statute allows Caltrans to design and construct intercity passenger rail projects and purchase right-of-way, traditional modal funding mandates restrict Caltrans ability to facilitate the development of non-highway modes. Recent investments in intercity rail have been largely the result of one-time capital funding provided by bond funds.

INTERSTATE 80 CORRIDOR

The 250 kilometer Union Pacific mainline between Sacramento, California and Sparks, Nevada has the longest continuous railroad grade in the world.

The railroad has proved to be a highly reliable mode of transportation. In the 105-year period between 1889 and 1994, the railroad was shut down because of snow only five times. With the exception of the thirteen day closure in January 1952 that stranded the *City of San Francisco* streamliner for seventy-two hours, and closed Interstate 80's predecessor, US 40, for about three weeks, the other four rail shut downs lasted from between one to three days.

On the other hand, during the eighteen years between 1974 and 1993, Interstate 80 was closed a total of 588 times, (an average of about 31 times per season) for a total of 2,375 hours or an average of 5.21 days per season.

In the I-80 Corridor, the rail line is underutilized for passenger rail services. The easiest way to increase capacity along this corridor with minimal cost and degradation to air quality, and without harming the environment, is to increase the passenger rail mode option by extending the Capitol Corridor service to Reno/Sparks, Nevada. The addition of only one or two passenger trains per day will provide an alternative mode of travel to the mountain ski resorts, the Lake Tahoe Basin, the Town of Truckee, and Reno/Sparks without significantly hindering the freight capacity of the line.

The existing Amtrak train, the *California Zephyr*, which runs between Oakland and Chicago, does not adequately serve the needs of local Bay Area to Reno/Sparks Corridor travelers. Travel on the

California Zephyr requires a reservation, while Amtrak fare and booking policies discourage or exclude local trips in favor of long haul passengers. The westbound train, which originates in Chicago two days earlier, is not reliable for travelers' day-use needs in the western end of the corridor. However, the extension of one or two Capitol Corridor trains per day, with fares and schedules that serve the local traveler and with good marketing, could provide transportation for up to one thousand passengers per train.

A survey conducted by the Truckee/North Tahoe Transportation Management Association and the Placer County Transportation Planning Agency (PCTPA) in March 1994, indicated skiers interest in rail transportation in the I-80 Corridor. Survey results showed that 94% of all respondents traveled by automobile to the ski areas. When asked if they wanted a ski train, 61% of all respondents said "Yes" and 14% said "No", 70% said they would take a ski train during bad weather, and 11% said they would not. When asked if they would take a ski train instead of facing holiday delays on I-80, 75% said "Yes", and 10% said "No."

The ski market was not included in calculating ridership estimates in the Caltrans Sacramento-Tahoe-Reno Intercity Rail Study. The survey results indicate there is potentially a substantial ski market. While a significant overall mode split for rail is not assumed, skiers could increase ridership on Capitol Corridor extension trains, and possibly lessen travel demand on I-80, especially during peak demand periods.

Future Conditions for Rail Transportation Facilities

In 1995, Caltrans completed a study of the potential for intercity rail operations between Sacramento and Reno. Key conclusions and findings from this study included:

- ◆ The extension of the Capitol Corridor service to Reno/Sparks would have a positive impact on the farebox recovery ratio for the entire Capitol Corridor service.
- ◆ There is a potentially significant rail market for skiers, which has not yet been included in the patronage estimates for intercity rail service in the I-80 Corridor.
- ◆ By the year 2020, Caltrans District 3 will be faced with the need to provide transportation capacity for an additional one million people.
- ◆ Air quality and economic and financial constraints will limit the improvements to the highway system, making multimodal alternatives, especially the mass transportation services, of major importance.
- ◆ Lack of public funding for railroads will be a constraint to implementing service in this corridor.
- ◆ The development of passenger rail transportation as an alternative mode of travel to the Tahoe Basin and the Reno/Sparks area will provide improved access to world-renowned recreational attractions, help prevent environmental degradation, and will provide for the continued economic vitality of the region.

Recommendations from the study are listed below:

- ◆ Caltrans and the Nevada County Department of Transportation should work closely with Amtrak, the local jurisdictions in the I-80 Corridor, the ACR 132 Policy Advisory Committee, and private businesses in the Reno/Sparks and Lake Tahoe areas to

develop an implementation plan for expanding Capitol Corridor service between Sacramento and Reno/Sparks. This implementation plan should include a realistic funding program which reflects the major constraints with Caltrans, Nevada County Department of Transportation, and Amtrak.

- ◆ Representatives from the Nevada County Transportation Commission, Washoe Regional Transportation Commission, and the State of Nevada should be invited to join the ACR 132 Policy Advisory Committee and participate in the development of the implementation plan for extending the Capitol Corridor service to Reno/Sparks.
- ◆ Caltrans and the Nevada County Department of Transportation should coordinate with local and regional operators to connect feeder bus service between Truckee, Tahoe City, and South Lake Tahoe via California Highway 89 and Nevada Highway 28, with a schedule that meets the proposed extension of the Capitol service in Truckee.

In 2000, Amtrak completed a 20-Year Plan for rail service in California that also concluded that it would be feasible and desirable to expand the Capitol Corridor service to Reno.

In 2003, NCTC, PCTPA, Capitol Corridor Joint Powers Authority (CCJPA), the Town of Truckee, and interested businesses in the North Tahoe area decided to jointly fund a study exploring the feasibility of extending daily Capitol Corridor service to Reno. This study has been suspended until the UPRR can complete its own evaluation of the extent of the growing demand for freight services and capacity in the corridor. Once this evaluation by UPRR is completed in a year or two it is hoped that interest in the extension of the Capitol Corridor passenger service can be revitalized.

Rail Transportation Facility Needs

Due to the lack of rail facilities in Nevada County, and data describing facility operations, short-term needs could not be determined. Long-term needs have been identified in the *Nevada County Rail Feasibility Study*. The long-term need for rail transit services in Nevada County is based on excessive automobile demand on local and state roadways, as well as, obtaining local goals to reduce environmental impacts on the County's transportation system.

The long -term rail transit needs as identified by the *Nevada County Rail Feasibility Study* includes implementing the I-80 Bay Area-Truckee/Reno winter train service. Initially, the service should be operated only during winter months, which is the strongest market base on which to build patronage. The study states that this service has the potential to cover all of its operating costs through passenger fares. Initially, the service is not expected to significantly reduce automobile travel in the I-80 Corridor. Nevertheless, as the Corridor becomes increasingly congested, this service will become a more attractive alternative to the automobile.

Another viable option for rail transit service in Nevada County is the use of feeder bus service, connecting Nevada County population centers with planned State-supported intercity passenger rail services in the Auburn-Sacramento-Oakland-San Jose Corridor.

The Action Plan of the *Nevada County Rail Feasibility Study* indicated that successful implementation of rail programs would present various challenges and require aggressive and focused programs, including the following: 1) additional detailed planning and feasibility studies for projects identified in this preliminary study, 2) development of a strong local and/or regional advocacy for projects, 3) establishment of a reliable funding source for both capital needs and ongoing costs for maintenance and operations, and 4) interjurisdictional agreements on basic program strategies and responsibilities.

RAIL ACTION PLAN

Short and Long-Term

1. Encourage expansion of the Amtrak Capitol Corridor passenger service to Colfax, Soda Springs, Truckee, and Reno/Sparks. (NCTC, PCTPA, CCJPA, Caltrans, Washoe County Regional Transportation Commission, jurisdictions, TNT/TMA)
2. Support federal legislation to provide funding for rail corridors, including the Amtrak Capitol Corridor. (NCTC, PCTPA, CCJPA, Washoe County Regional Transportation Commission, jurisdictions, TNT/TMA, Federal representatives)

FIGURE 5 RAIL TRANSPORTATION

AIR QUALITY

Existing Air Quality Conditions

On June 15th 2004, the Environmental Protection Agency (EPA) designated western Nevada County as an isolated rural "basic non-attainment" area under the Federal 8-hour ozone national air quality standard. The "basic" designation recognizes that the cause of exceedences of state ozone standards occurs primarily from the transport of pollutants generated outside of Nevada County. The primary source of Nevada County's ozone pollution is from the broader Sacramento area and, to a small degree the San Francisco Bay area. Table A-2 of the appendix displays ozone data from the Grass Valley monitoring station and ozone precursor forecasts for Nevada County.

The standard is designed to protect the public from exposure to ground-level ozone. Ozone is unhealthy to breathe, especially for people with respiratory diseases and for children and adults who are active outdoors. The 8-hour ozone standard is based on averaging air quality measurements over 8-hour blocks of time. EPA uses the average of the annual fourth highest 8-hour daily maximum concentrations of ozone from each of the last three years of air quality monitoring data to determine a violation of the ozone standard.

Regional Air Quality Planning

Isolated rural non-attainment areas are required to complete a Transportation Conformity Analysis/Determination when a federal approval is required on a regionally significant transportation or transit project. The "Conformity" finding must show that the project, along with all of the regionally significant federal and non-federal transportation projects, does not create new violations of the National Ambient Air Quality Standards (NAAQS), increase the severity of NAAQS violations, or delay timely attainment.

Non-attainment areas are also required to prepare and submit a SIP no later than three years after the date of designation. The SIP is an air quality plan developed by the California Air Resources Board, in cooperation with local air districts, to attain and maintain Federal Clean Air Act Standards. The SIP for western Nevada County will identify all sources of emissions of pollutants that exceed Federal standards in the non-attainment area and detail the strategies the area will utilize to meet the NAAQS. The SIP for our region will be incorporated into a statewide SIP that will outline the measures that the State will take in order to improve air quality in non-attainment areas.

The Northern Sierra Air Quality Management District (NSAQMD) works in conjunction with the NCTC and California Air Resources Board to prepare an air quality attainment plan for western Nevada County. NSAQMD is charged with the responsibility to attain and maintain the State and Federal ambient air quality standards, and depend upon local ordinances and/or public education and voluntary programs to prevent the deterioration of ambient air quality.

Nevada County is within the Mountain Counties Air Basin. This basin is classified as "non-attainment" for ozone and PM-10, and is either "attainment" or unclassified for other pollutants. Other automobile generated pollutants are PM2.5 and carbon monoxide. Historically, carbon monoxide has not been monitored in high enough levels to be a concern in Nevada County. Recently, the U.S. EPA promulgated new, more stringent National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter. As of mid-1997, a more stringent 8-hour ozone standard was promulgated to replace the 1-hour ozone standard. At the same time, EPA also promulgated a NAAQS for PM2.5 (particulate matter with an aerodynamic diameter less than 2.5 microns).

Future Air Quality Conditions

Integration of the Regional Transportation Plan and the Air Quality Plan is recommended by the California Air Resources Board (CARB) to facilitate implementation of emission reducing measures when appropriate. Specifically, the RTP must address transportation performance standards of the California Clean Air Act. Nevada County is required to adopt all reasonably available transportation control measures.

The CCAA does not define what measures are reasonably available or how decisions on “reasonableness” are to be made. According to the *California Clean Air Act Transportation Requirements Guidance*, February 1990, prepared by the CARB, the air quality management districts, in coordination with local and state transportation agencies, have the primary responsibility to determine the measures that are reasonable, and to ensure that those so deemed are included in the district’s air quality plan. In this case, the NCTC is coordinating with NSAQMD and appropriate agencies in the development and adoption of Transportation Control Measures for Nevada County. Additional strategies and programs may be identified in the attainment plan that is to be prepared by the NSAQMD.

To demonstrate the overall on-road regional emissions projections for the County, the CARB Almanac Emission Projection Data published in 2005 was utilized. Table 11 displays estimates of on-road motor vehicle emissions based on motor vehicle fleet emission data and travel data for Nevada County. The CARB Almanac Emission Projections for Nevada County demonstrates that between 2005 and the year 2020 emissions of reactive organic gases, nitrogen oxides, carbon monoxide, and sulfur oxides are expected to decrease an average of 56 % from 2005 emission levels (see Table 11). This is the case even though vehicle miles traveled are expected to increase approximately 57 % by the year 2020. This substantial decrease in emissions is related to assumptions in the modeling regarding improving emission rates for vehicles due to state emission control programs.

Additionally, the RTP seeks to reduce air quality issues associated with future growth by increasing the efficiency of the transportation system and increasing alternative transportation options.

Table 11
CARB Almanac Emission Projection Data
Estimated County-Wide Emissions from Vehicles in Nevada County
2005, 2010, 2015 and 2020

Pollutant/ Parameters	2005	2010	2015	2020	Percentage Change
Daily Emissions in Tons/Day for:					
Reactive Organic Gases	3.532	2.565	1.858	1.422	60% Decrease
Carbon Monoxide	31.396	21.879	14.594	10.114	68% Decrease
Nitrogen Oxides	4.673	3.398	2.275	1.550	67% Decrease
Sulfur Oxides	0.027	0.017	0.017	0.019	30% Decrease
Daily Vehicle Miles Traveled	2,869,000	3,456,000	3,963,000	4,492,000	57% Increase

AIR QUALITY ACTION PLAN

Short-Term and Long-Term

1. Conduct interagency consultation as needed to review transportation related air quality issues. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)
2. Complete a Transportation Conformity Analysis on regionally significant transportation projects when federal funding or federal approval is required in coordination with local, state, and federal agencies. (NCTC, NSAQMD, CARB, Caltrans, EPA, FHWA, FTA)
3. Coordinate with NSAQMD during the development of the State Implementation Plan for Nevada County. (NCTC, NSAQMD)
4. Administer the selection of projects eligible for Congestion Mitigation Air Quality funds in western Nevada County for projects that reduce emissions and improve air quality. (NCTC, NSAQMD)

V. FINANCIAL ELEMENT

INTRODUCTION

The Financial Element of the RTP is intended to discuss the financial assumptions and forecasts of transportation costs and revenues necessary to implement the Action Element of the 2005 RTP.

The Action Plan calls for an extensive list of improvements over the period of the Plan. As is true in many other areas of the state, there are not enough existing Federal, State, or regional resources to fully fund all of the improvements necessary.

This financial analysis presents a constrained funding scenario made up of the revenue which is reasonably expected to be available from existing funding mechanisms currently in place over the horizon of the RTP, including projections of the future STIP, and federal transportation funds.

BACKGROUND

State Highways Facilities

The NCTC currently has \$25,443,000 of Regional Improvement Program (RIP) funds programmed in the State Transportation Improvement Program (STIP). Caltrans currently has \$9,080,000 of Interregional Improvement Program (IIP) matching funds programmed in the STIP for the SR 49 widening project in the vicinity of La Barr Meadows Road in western Nevada County. Estimates of future revenues for State highway improvements are based on the California Department of Transportation's 2006 STIP Fund Estimate. Based on this estimate of the STIP revenue forecasts, the Financial Element of the RTP assumes additional programming capacity of approximately \$1,000,000 of RIP funds a year beginning in 2014. Therefore, over the period of the RTP the financial element assumes a total of approximately \$13,000,000 in additional RIP funding.

Recognizing that the Dorsey Drive Interchange is a top priority for the community, the financial element assumes that the \$13,000,000 in forecasted RIP revenues will be programmed to cover the existing construction deficit and any additional cost increases.

Regional Roadways

Revenues for regional roadway improvement projects off the state highway system were based on funding forecasts of the Regional Transportation Mitigation Fee Program, and local jurisdiction development fee programs.

Funding for transportation improvements has historically been a problem in Nevada County. Decreases in gas tax revenues, coupled with increased capital needs for repair and retrofit of bridges throughout the state, precluded the completion of any major improvements for Nevada County between 1990 and 1995.

In the early 1990's there was concern about the deteriorating condition of the Nevada County's public road system. A 1993/94 Grand Jury Report documented \$26,000,000 of road maintenance backlog. As a result, a group of concerned citizens circulated an initiative to adopt an ordinance requiring expenditures of Motor Vehicle In-lieu Fees (MVF) for road maintenance. The initiative was placed on the March 1996 ballot as "Measure F" and was approved by voters and implemented by the Board of Supervisors. Even with five years of "Measure F" expenditures, there remains a county backlog in excess of \$20,000,000. The Nevada County Department of Transportation and

Sanitation indicates that with “Measure F” funding combined with revenue from the Transportation Congestion Relief Program (TCR) AB 2928 and the County road fund, of the 410 County maintained paved miles, 387 miles will be considered in good condition with only 23 miles remaining in fair or poor condition by 2016. The maintenance of the roads in the County maintained system never ends and is necessary to protect the investment that has been made in the system since 1997. Without “Measure F” funding, the remaining funds would only be enough to respond to system failures and there would be no on-going maintenance.

Transit Services

Based on the Five-Year Transit Development Plans for western and eastern Nevada County, it was assumed that transit operating expenses would increase 3 % per year, which would be approximately equal to the rate of inflation. Revenue projections were based on the forecasted amount of transit funding assumed to be available over the period of the RTP.

Non-Auto Facilities

It is assumed that the majority of non-motorized facilities in Nevada County will be funded through State grant programs, such as the State Bicycle Transportation Account, which had a funding level of \$7,200,000 statewide in 2005.

Aviation

The most recent Capital Improvement Programs were used to determine the improvement costs for Nevada County’s aviation facilities. It is assumed that the Nevada County Air Park will utilize operating revenues as a local match to leverage California Aid to Airports Program (CAAP) grant funds for completion of the Capital Improvement Plan (CIP) projects.

IMPROVEMENT FUNDING PROGRAMS

Regional Funding Programs

The funding programs listed below describe the funding programs administered by the Nevada County Transportation Commission.

- ◆ ***Local Transportation Fund.*** Local Transportation Funds (LTF) is a revenue source generated by the 1/4 cent of the 7 ½ cent retail sales tax collected statewide. Funds are apportioned to each county based on the amount of tax collected in that county. In Nevada County, the NCTC has the authority to allocate LTF for transit, roadway, pedestrian, and bike projects. If NCTC finds that there are no unmet transit needs that are reasonable to meet, the remaining monies are available for use on development and maintenance of streets and highways.
- ◆ ***Regional Transportation Mitigation Fee Program.*** The Nevada County Transportation Commission managed a study process that defined the regional transportation investments needed to accommodate the forecasted growth in western Nevada County, and identified the financial resources needed to pay for the investments. The County of Nevada and the cities of Grass Valley and Nevada City participated in these studies at both the policy and technical levels. The study resulted in the development and adoption of the Regional Transportation Mitigation (RTMF) Fee Program.

The purpose of developing the RTMF Program was to ensure that future growth would fully mitigate both its direct and cumulative impacts. The County and the two participating cities are responsible for imposing and collecting the fee in their respective areas of jurisdiction. The following criteria have been used to determine which projects should be included in an RTMF Capital Improvement Program:

"Regional projects" are generally identified as follows:

- a. Projects on all ramp connections to freeways or expressways.
- b. Projects on roads functionally classified as "arterials" and above.
- c. Projects identified as providing regional circulation in city or county general plans and their EIRs.

When NCTC developed the RTMF, every effort was taken to ensure that the fee assessment would be tied to the actual traffic generated by each new project that would pay the fee. Moreover, the mitigation fee was structured to ensure that the amount paid by each project would not exceed the estimated and reasonable cost to mitigate the project's proportionate share of added traffic it generated. More information regarding the RTMF program is available at the NCTC office.

Potential Regional Revenue Sources

Providing adequate funding for the actions recommended in this RTP will require a combination of funding mechanisms based on need and community acceptance. Local jurisdictions will also have to rely more heavily on their own resources, as State funds are spread over an expanding number of communities throughout California. Described below are potential local funding programs that have been successful in other jurisdictions and are applicable for use in Nevada County.

- ◆ **Local Option Sales Taxes.** These taxes have been instituted in several counties to fund transportation improvements. Future increases in traffic congestion and the limited amount of State funding available to implement needed transportation improvements may make this a viable option to Nevada County residents in the future. Local option sales tax funding for transportation improvements has been approved by voters in many of the metropolitan counties. It appears that voters are generally receptive to such a tax, when the specific projects to be funded by the tax meet the needs identified by the voters.
- ◆ **Local Option Motor Vehicle Fuel Taxes.** These taxes can be implemented by a two-thirds endorsement of Nevada County voters and an agreement between applicable agencies on the amount of tax and allocation of revenues.
- ◆ **Conditions of Development.** Conditions may be placed on proposed development, which contributes to a transportation system impact. A development may be conditioned to assist in the implementation of any improvement directly related to their development.
- ◆ **Benefit Assessment District.** This allows local governments to recover the costs of public improvements directly from property owners benefiting from the project(s). The assessment is based on the premise that the transportation improvement project(s) enhances the value of the affected property. Assessments are enacted according to a zone of benefit, with each affected parcel being assessed a specified dollar amount. The amount of revenue generated from an assessment district is dependent on the cost of its proposed public improvements.
- ◆ **Mello-Roos Community Facilities District.** This source of revenue provides for the issuance of tax-free municipal bonds by creating a special tax assessment district to repay the debt.

Local jurisdictions may form the district and levy a special tax after two-thirds approval of the voters (or if uninhabited, two-thirds of the landowners) within the proposed district. Total revenues are dependent on the costs of proposed projects.

State Funding Programs

- ◆ ***State Transit Assistance Funding.*** State Transit Assistance (STA) funds are provided by the State from the Transportation Planning and Development Account pursuant to the Transportation Development Act for public transit purposes. These funds are allocated to regional transportation planning agencies pursuant to Sections 99313 and 99314 of the Public Utilities Code. The 99313 funds are allocated based on population, and the 99314 funds are allocated based on transit revenues collected.
- ◆ ***State Transportation Improvement Program.*** The State Transportation Improvement Program (STIP) consists of two broad programs; 75% of the funds available to the STIP are committed to the Regional Improvement Program (RIP). Projects to be funded from the RIP are selected by regional transportation planning agencies and are included in their Regional Transportation Improvement Programs (RTIPs). The RTIP may propose to program or reserve up to 5% of the county share for project planning, programming, and monitoring by the transportation planning agency. The remaining 25% of STIP funds will be available to Caltrans for State highways, intercity rail, grade separation, and mass transit guideway improvements. This funding program is called the Interregional Improvement Program (IIP) and Caltrans list of projects will be known as the Interregional Transportation Improvement Program (ITIP). If Caltrans and a regional agency agree, they may recommend a new project be jointly funded from county and interregional shares. In that case, the region will nominate the county share in the RTIP and Caltrans will nominate the interregional share in the ITIP. RTIPs and the ITIP are submitted to the California Transportation Commission (CTC) for approval.

Except for project planning, programming, and monitoring, all RTIP projects will be capital projects, (including project development costs), needed to improve transportation in the region. These projects generally may include, but are not limited to, improving State highways, local roads, public transit (including buses), intercity rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, soundwalls, intermodal facilities, and safety. Non-capital costs for transportation system management or transportation demand management may be included where the regional agency finds the project to be a cost-effective substitute for capital expenditures. Other non-capital projects (e.g. road and transit maintenance) are not eligible.

The interregional program has two parts:

1. The first, funded from 10% of the STIP funding, is nominated solely by Caltrans and projects may include State highway, intercity rail, mass transit guideway, or grade separation projects.
2. The second part, funded from at least 15% of the STIP funding, is limited to intercity rail projects and improvements outside urbanized areas on the interregional road system.

Under restricted circumstances, a regional agency may also recommend a project for funding from the second part of the interregional program.

A regional agency may recommend improvements outside urbanized areas on the interregional

road system, and the CTC may program that regional recommendation, only if the CTC makes a finding that based, on objective analysis, the recommended project is more cost-effective than a project submitted by Caltrans.

The CTC envisions an Interregional Improvement Program that works toward the achievement of the following six objectives:

1. Completing a trunk system of higher standard State highways (usually expressways and freeways).
2. Connecting all urbanized areas, major metropolitan centers, and gateways to the freeway and expressway system to ensure a complete statewide system for the highest volume and most critical trip movements.
3. Ensuring a dependable level of service for movement into and through major gateways of statewide significance and ensuring connectivity to key intermodal transfer facilities, seaports, air cargo terminals, and freight distribution facilities.
4. Connecting urbanizing centers and high growth areas to the trunk system to ensure future connectivity, mobility, and access for the state's expanding population.
5. Linking rural and smaller urban centers to the trunk system.
6. Implementing an intercity passenger rail program, (including interregional commuter rail), that complies with Federal and State laws, improves service reliability, decreases running times, and reduces the per passenger operating subsidy.

The Caltrans ITIP will be based on a Strategic Plan for implementing the interregional program. The Strategic Plan should address development of both the interregional road system and intercity rail in California.

- ◆ ***State Highway Operations and Protection Program (SHOPP).*** The SHOPP is a ten-year program developed by Caltrans for the expenditure of transportation funds for major capital improvements that are necessary to preserve and protect the State highway system. Projects included in the SHOPP are limited to capital improvements relative to maintenance, safety, and rehabilitation of State highways and bridges, which do not add capacity to the system.
- ◆ ***Bicycle Transportation Account (BTA) Program.*** The BTA is intended to provide funds for bicycle transportation projects that improve the safety and convenience for bicycle commuters. Funding for projects is awarded through a competitive grant process and administered by Caltrans. To be eligible for BTA funding, cities and counties must have an adopted Bicycle Transportation Plan that has been approved by the appropriate regional transportation planning agency and Caltrans.

The statewide funding level of the BTA was \$7,200,000 statewide in 2005. Applicants must provide a match of at least 10 % of the total project cost.

- ◆ ***California Aid to Airports Program (CAAP).*** CAAP encompasses three different programs administered by Caltrans Division of Aeronautics. These include discretionary grants for capital improvements, annual grants of \$10,000 each to general aviation airports, and matching funds for Federal Aviation Administration (FAA) grants.

Federal Funding Programs

The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) was enacted in July 2005. SAFETEA-LU authorizes the Federal surface transportation programs for highways, highway safety and transit for 2005-2009. A summary of important Federal programs is listed below.

- ◆ ***Congestion Mitigation and Air Quality Program (CMAQ).*** This funding program was established by the 1991 Federal Intermodal Surface Transportation Efficiency Act (ISTEA) and was re-authorized with the passage of SAFETEA-LU in 2005. Funds are directed to transportation projects and programs that contribute to the attainment of maintenance of National Ambient Air Quality Standards in non-attainment or air quality maintenance areas for ozone, carbon monoxide, or particulate matter under the provisions of the Clean Air Act. In 2004, western Nevada County was designated as an isolated rural "basic non-attainment" area under the Federal 8-hour ozone national air quality standard and is now eligible for CMAQ funds. The revenue available for fiscal year 2005/06 is \$390,267,867 statewide and approximately \$800,000 for Nevada County.

Eligible Federal aid projects include public transit improvements; high occupancy vehicle (HOV) lanes; intelligent transportation infrastructure; traffic management and traveler information systems; employer-based transportation management plans and incentives; traffic flow improvement programs (signal coordination); fringe parking facilities serving multiple occupancy vehicles; shared ride services; bicycle and pedestrian facilities; flexible work-hour programs; outreach activities establishing Transportation Management Associations (TMAs); and fare/fee subsidy programs.

- ◆ ***Federal Transit Administration (FTA).*** Title III of the 1991 ISTEA revised the old Urban Mass Transit Administration (UMTA) programs and redesigned the UMTA to be the Federal Transit Administration.
 1. Section 5310 Capital funds for elderly and disabled transit programs. This program is administered by Caltrans. Private non-profit corporations and public agencies are also eligible.
 2. Section 5311 Rural Transportation Assistance funds can be used for non-urbanized public transportation, both capital and operating. Although these funds are subject to federal approval, they are programmed locally by the NCTC.
- ◆ ***Regional Surface Transportation Program Funds.*** The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 replaced the Federal-Aid System programs with the Surface Transportation Program (STP). The funds are approved by Congress and then passed through the State to the RTPAs. In California, Caltrans will exchange the Federal funds for State funds which have fewer administrative requirements. The exchanged funds may be used for any purpose allowed by Article XIX of the State Constitution. Those purposes include: research, planning, construction and improvement, maintenance, operation of public streets and highways (and their related public facilities of non-motorized traffic), including the mitigation of their environmental effects, the payment for property taken or damaged for such purposes, and the administrative costs related to such purposes. Article XIX also provides for some purposes related to "Mass Transit Guideways", but there are no such facilities in Nevada County. NCTC has always exchanged its Federal funds for State funds and has programmed them for maintenance and rehabilitation of local streets and highways.

- ◆ **Transportation Enhancement Activities (TEA).** National policy in ISTEA included recognition that transportation programs, while vital for national mobility and international competitiveness, must also include consideration of overall environmental context and community values and setting. This policy is reflected in the TEA program, which has the intent for transportation enhancements to become a common part of the transportation investment policy integrated into many projects. TEA funds are to be used for transportation related capital improvement projects that enhance quality-of-life in or around transportation facilities. Projects must be over and above required mitigation of normal transportation projects and must be directly related to the transportation system.
- ◆ **Airport Improvement Program (AIP).** The Federal AIP provides grants to public agencies, private owners and entities, for the planning and development of public-use airports that are in the National Plan of Integrated Airport System (NPIAS). Eligible projects include improvements related to enhancing airport safety, capacity, security, and environmental concerns. In general, sponsors can use AIP funds on most airfield capital improvements or repairs, except terminals, hangars, and non-aviation development.
- ◆ **Safe Routes to School Program (SR2S).** Caltrans has established a “Safe Routes to School” construction program utilizing Federal transportation funds for construction of bicycle and pedestrian safety and traffic calming projects. To qualify for SR2S funds, the project must be located on either a State highway or local road. Projects must correct an identified safety hazard or problem on a route that students use for trips to and from school.

STATE HIGHWAY AND REGIONAL PROJECT FUNDING FORECAST

The tables below identify the Federal, State, and regional revenue sources that are forecasted to be available for State highway, regional improvement projects, and transit services during the Plan period. Forecasted revenues were then matched to the “Financially Constrained” State highway and regional transportation projects contained in Table 2 (page 29) of the RTP. Table 15 (page 80) below summarizes the costs and revenues of the “Financially Constrained” projects. Table 16 (page 80) below identifies the amount of the financially unconstrained State highway and regional transportation needs identified in Table 3 (page 33) of the RTP.

TABLE 12
State Highway Project Funding Forecast (In Thousands \$)

**Regional Improvement Program (RIP), Interregional Improvement Program (IIP),
State Highway Operations and Protection Program (SHOPP)**

	Short-Term 2005-2015	Long-Term 2016-2027	Total
RIP Funding Forecast	28,378	11,000	39,378
IIP Funding Forecast	9,080	0	9,080
Federal Earmark	2,828	0	2,828
SHOPP Funding Forecast *	6,800	0	6,800
Total	47,086	11,000	58,086

* SHOPP funding forecasts are only for identified “regional projects” included in Table 2 (page 29).

TABLE 13
Regional Roadway Project Funding Forecast (In Thousands \$)

**Regional Transportation Mitigation Fee Program (RTMF), Western Nevada County
Fee Programs (WNCFP), Town of Truckee Traffic Mitigation Fees (TTTMF)**

	Short-Term 2005-2015	Long-Term 2016-2027	Total
RTMF Revenue	9,402	4,775	14,177
WNCFP Revenue*	5,785	6,782	12,567
TTTMF Revenues*	29,010	10,500	39,510
Total	44,197	23,057	66,254

*Funding forecasts are identified for the “regional projects” included in the associated fee programs in western and eastern Nevada County.

TABLE 14
Regional Surface Transportation Program (RSTP)
Funding Forecast* (In Thousands \$)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Nevada County	6,629	15,195	21,824
Grass Valley	1,282	2,939	4,221
Nevada City	301	689	990
Truckee	1,544	3,538	5,082
Total	9,756	22,361	32,117

*RSTP revenue projections assume a conservative 3% annual increase beyond 2005/06.

TABLE 15
Summary of Costs and Revenues
Financially Constrained State Highway and Regional Projects

Financially Constrained Project Costs From Table 6 (In Thousands)				
	Short-Term Costs 2005-2015	Long-Term Costs 2016-2027	Total Costs	Estimated Revenue
STIP Funded Projects (RIP&IIP)	35,398	5,036	40,434	48,458
Federal Earmark	2,828	0	2,828	2,828
SHOPP Funded Regional Projects	6,800	0	6,800	6,800
RTMF Funded Regional Projects	9,402	4,775	14,177	14,177
WNCFP Funded Regional Projects	5,785	6,782	12,567	12,567*
TTTMF Funded Regional Projects	29,010	10,500	39,510	39,510*

* Funding forecasts are identified for the “regional projects” included in the associated jurisdictional fee programs in western and eastern Nevada County.

TABLE 16
Summary of Costs and Deficits
Unconstrained State Highway and Regional Projects

Unconstrained Project Costs From Table 7 (In Thousands)				
	Short-Term 2005-2015	Long-Term 2016-2027	Total Costs	Deficit
Regional Projects western Nev. Co.	67,504	91,700	159,204	(159,204)
Regional Projects eastern Nev. Co.	225,674	1,500	227,174	(227,174)

TRANSIT FUNDING FORECASTS

The tables below identify the Federal, State, and local revenue sources that are forecast to be available for the operation of public transit during the Plan period. Forecasted revenues were then compared to the projected operating costs for public transit services in western and eastern Nevada County and detailed in Tables 24 & 26 on page 83.

TABLE 17
Local Transportation Fund Apportionment Forecast (In Thousands \$)

	Nevada City	Grass Valley	Nevada County	Truckee	Total All Jurisdictions
Short-Term 2005-2015	820	3,498	18,087	4,212	26,617
Long-Term 2016-2027	1,365	5,820	30,092	7,007	44,284
Total Each Jurisdiction	2,185	9,319	48,180	11,218	70,902

Assumes a conservative increase of 3% per year in LTF apportionments projected from the FY 05/06 Revised Findings of Apportionment.

TABLE 18
Forecast of Community Transit Service Revenues (In Thousands \$)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Nevada County	1,401	2,331	3,732

Assumes a conservative annual 3% increase beyond FY 05/06.

TABLE 19
Transit Fare Revenue Forecast (In Thousands \$)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Gold Country Stage	2,407	3,793	6,200
Gold Country Telecare	1,211	1,909	3,120
Truckee Trolley	956	1,185	2,141
Truckee Dial- A-Ride	234	368	602

Assumes a conservative 2.5% annual increase of fare revenue beyond FY 04/05. Fare revenue forecasts for the Truckee Trolley assume \$85,500.00 in private partnerships annually continuing at the FY 04/05 amount.

TABLE 20
State Transit Assistance Revenue Forecast (In Thousands \$)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Truckee	327	543	870
Nevada County	1,889	3,143	5,032

The PUC 9913 and 9914 STA revenues are projected to increase by 3 % per year beyond 2004/05.

TABLE 21
Federal Transit Administration (Section 5311) Revenues Forecast (In Thousands \$)

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Nevada County	3,370	4,045	7,415
Town of Truckee	635	762	1,397

Section 5311 revenues were projected to continue at the fiscal year 2004/05 funding level.

TABLE 22
Capital Corridor Joint Powers Authority Route 5X Revenue Forecast

	Short-Term 2005-2015	Long-Term 2016-2027	Total
Nevada County	1,109	1,844	2,953

TABLE 23
Summary of Transit Revenues for Western Nevada County (In Thousands)

Transit Revenue	W. Nevada County Short-Term 2005-2015	W. Nevada County Long-Term 2016-2027	Total
LTF Funds	22,406	37,278	59,684
CTS Funds	1,401	2,331	3,732
Fare Revenue	3,618	5,702	9,320
STA Funds	1,889	3,143	5,032
FTA 5311 Funds	3,370	4,044	7,414
CCJPA Rte. 5X Funds	1,109	1,844	2,953
Total	33,793	54,342	88,135

TABLE 24
Comparison of Projected Western Nevada County Transit/Paratransit
Revenue and Operating Costs (In Thousands)

	W. Nevada County Short-Term 2005-2015	W. Nevada County Long-Term 2016-2027	Total
Projected Transit Revenue	33,793	54,342	88,135
Projected Transit/Paratransit Operating Costs*	33,177	55,199	88,376
Balance	616	(857)	(241)

* Assumes annual 3% escalation in operating costs beyond the projected FY 05/06 operating costs fixed route and paratransit services in western Nevada County.

TABLE 25
Summary of Transit Revenues for Eastern Nevada County (In Thousands)

Transit Revenue	E. Nevada County Short-Term 2005-2015	E. Nevada County Long-Term 2016-2027	Total
LTF Funds	4,212	7,007	11,219
Fare Revenue	1,189	1,553	2,742
STA Funds	326	543	869
FTA 5311 Funds	635	762	1,397
Total	6,362	9,865	16,227

TABLE 26
Comparison of Projected Eastern Nevada County Transit/Paratransit
Revenue and Operating Costs (In Thousands)

	W. Nevada County Short-Term 2005-2015	W. Nevada County Long-Term 2016-2027	Total
Projected Transit Revenue	6,362	9,865	16,227
Projected Transit/Paratransit Operating Costs*	5,429	9,033	14,462
Balance	933	832	1,765

* Assumes annual 3% escalation in operating costs beyond FY 04/05 operating costs for fixed route and paratransit services in eastern Nevada County.

NON-MOTORIZED TRANSPORTATION FUNDING

Funding sources administered by NCTC that are eligible for non-motorized transportation projects include Local Transportation Fund (LTF) Pedestrian and Bicycle funds, Transportation Enhancement Activities (TEA) funds, and Congestion Mitigation Air Quality (CMAQ) funds. Forecasts of LTF Pedestrian and Bicycle funds, assuming an annual increase of 3% beyond FY 2005/06, indicate approximately \$1,446,400 will be available over the Plan period. TEA funding forecasts, assuming to continue at the annual amounts based on the six-year 2005 Federal Transportation Reauthorization, indicate approximately \$4,161,650 will be available over the Plan period. Forecasts of CMAQ funding revenue for western Nevada County, assuming a 5% increase beyond FY 2005/06, indicates approximately \$31,336,517 will be available over the Plan period.

However, due to specific air quality non-attainment issues, it can be assumed that the majority of CMAQ funding is utilized towards projects that will make more measurable improvements to air quality, such as replacement of vehicles with alternatively or clean fueled vehicles. The majority of non-motorized facilities in Nevada County will be funded through State grant programs, such as the State Bicycle Transportation Account, which had a funding level of \$7,200,000 statewide in 2005.

AVIATION FUNDING

It is assumed that the Nevada County Air Park will utilize operating revenues as a local match to leverage California Aid to Airports Program (CAAP) grant funds for completion of the Capital Improvement Plan (CIP) projects. The Tahoe-Truckee Airport generates revenues from operating expenses and special district property tax revenues collected within the Truckee-Tahoe Airport District. It is assumed that the Tahoe-Truckee Airport will utilize operating and property revenues to construct projects included in their CIP and as a local match for the Federal Airport Improvement Program (AIP) or State CAAP grant funding.

APPENDIX

